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George Bugbee, Executive Director

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Calendar of Association and Allied Meetings ... 6
Officers of the American Hospital Association ... 10
Index to Advertisers ... 130

ARTICLES

New York City's Long-Range Program for Extending Hospital Care into the Home — Marcus D. Kogel, M.D., and Alexander W. Kruger, M.D. ... 35
A Simple Collection Aid for the Small Hospital — Robert A. Anderson ... 39
Remodeling the Operating Room to Assure Safety — E. Atwood Jacobs ... 42
Avoiding Baby Mixups: Some Principles and Procedures ... 45
The Technical Aspects of a Hospital's Departments — Ray E. Brown, F. Stanley Howe, R. Z. Thomas Jr., C. C. Hillman, M. H. Eichenlaub, D. R. Easton, M.D., Lawrence J. Bradley, Otis L. Anderson, M.D., Fred M. Walker, Morris H. Kreeger, M.D., Sister Mary Antonella, S.C.N. ... 47
Bud Finds a Place for the Linen — Herbert M. Krauss ... 54
Educating the Visitors of Tuberculosis Patients — Lillian F. Hutchinson ... 56
Medical Records on Microfilm — Sister Mary Eugene, R.S.M., R.R.L. ... 59

FEATURES

A Glossary of Federalese — Jack Masur, M.D. ... 55

EDITORIALS

The Fire in Davenport ... 60
MacEachern and Hawley ... 60
A Year of Opportunity ... 60
Master Menu Dividends ... 61

DEPARTMENTS

Your President Reports ... 12
Service From Headquarters ... 20
Opinions—On Adopting a New Fiscal Year ... 30
Medical Review ... 68
Purchasing ... 73
Research Can Mean Economy in the Purchasing Department — Robert Whitefoot Jr.
Comment
Current Price Trends
Engineering and Maintenance ... 81
Maintenance Does Not Stop at the Hospital Kitchen Door — Thomas C. Thompson
Comment
Dietetics Administration ... 86
Applying the Master Menu to the Hospital's Own Problems — Ensio K. F. Ronka, M.D.
The Master Menu Is Simple Only in Its Application and Use
Master Menus for March
Laundry Management ... 99
A System of Cost Analysis for the Institutional Laundry — Fritz Field
Comment
The Literature ... 106
News ... 107
Blue Cross (See Prepaid Care, News)
Personal News ... 122

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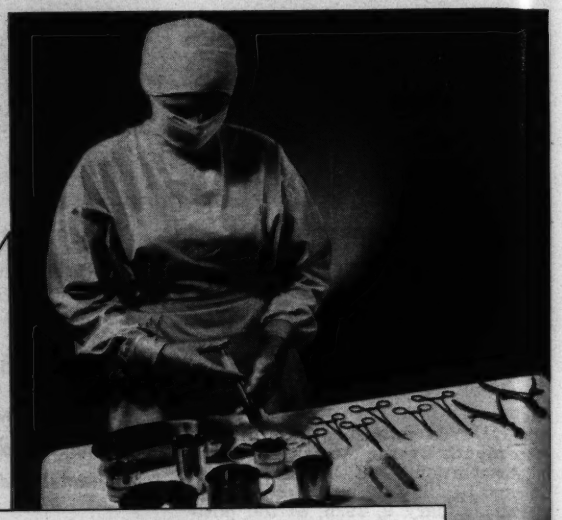

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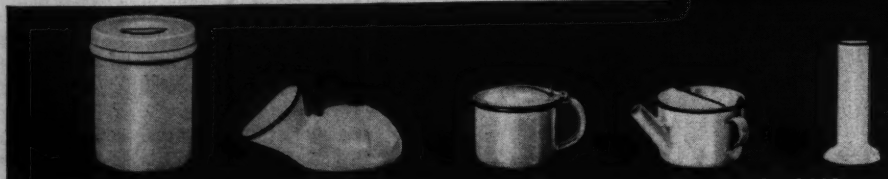

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PRESIDENT REPORTS

EARLY IN DECEMBER we had a series of good meetings in Chicago. The Council on Prepayment Plans and Hospital Reimbursement led off, followed by meetings of the Coordinating Committee, the Board of Trustees, the Program Committee and the Council on Administrative Practice. I attended five of the six-day sessions and committed the unpardonable sin of dozing off briefly during the afternoon of the fourth day. To make matters worse, I was chairman of the meeting. The executive director, being of a charitable disposition tried to make me feel the lapse was justified. Nevertheless I am conscience-stricken and expect to pay a price through self-reproach.

In mid-December I made a second trip to Chicago primarily to attend meetings of the Council on Education and the committee to study and report on the problems of licensure of the practical nurse. I found time to visit headquarters twice and on one occasion I signed some 300 certificates for women's hospital auxiliary organizations qualifying as institutional members under the Association by-laws, as amended at the Cleveland convention last fall. Among subjects discussed by me and the executive director was the possibility of staging a color television demonstration in the convention hall at Atlantic City during the annual meeting next September. The demonstration would be conducted along the lines of that presented at the meeting of the American College of Surgeons in Chicago late last fall, with emphasis on procedures other than surgery.

Television is being used for teaching purposes and in the future it may become an important adjunct of our school system. Just how it can be employed by hospitals and schools of nursing is yet to be explored, but from what I have learned about demonstrations to date I am convinced we should get some first hand information on the subject if possible.

SITTING WITH THE Council on Education at its meeting recently I was most favorably impressed with the report covering the 1949 institute program. Without a detailed report, such as I heard presented and discussed, one cannot appreciate the job that has been done in organizing, planning and conducting institutes. Really, I was amazed at the time and effort applied by members of the Association headquarters staff and faculty participants to make the institutes available to certain of our hospital personnel. Last year 14 institutes were conducted at different points around the country. The attendance was roughly 1,050 with representation from all but two states, from Puerto Rico and from Canada.

Not long ago institutional members of the Association received an announcement of the 1950 schedule in which 12 five-day institutes and nine two-day institutes are projected. The program is comprehensive as to subject coverage, and the geographic distribution of ses-

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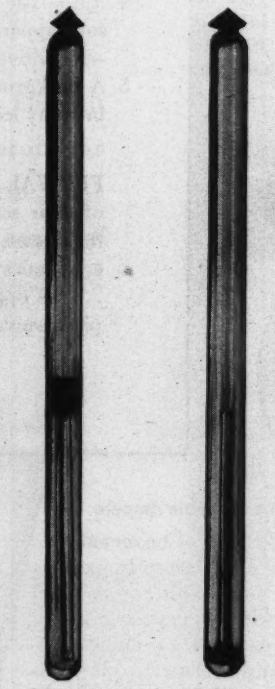

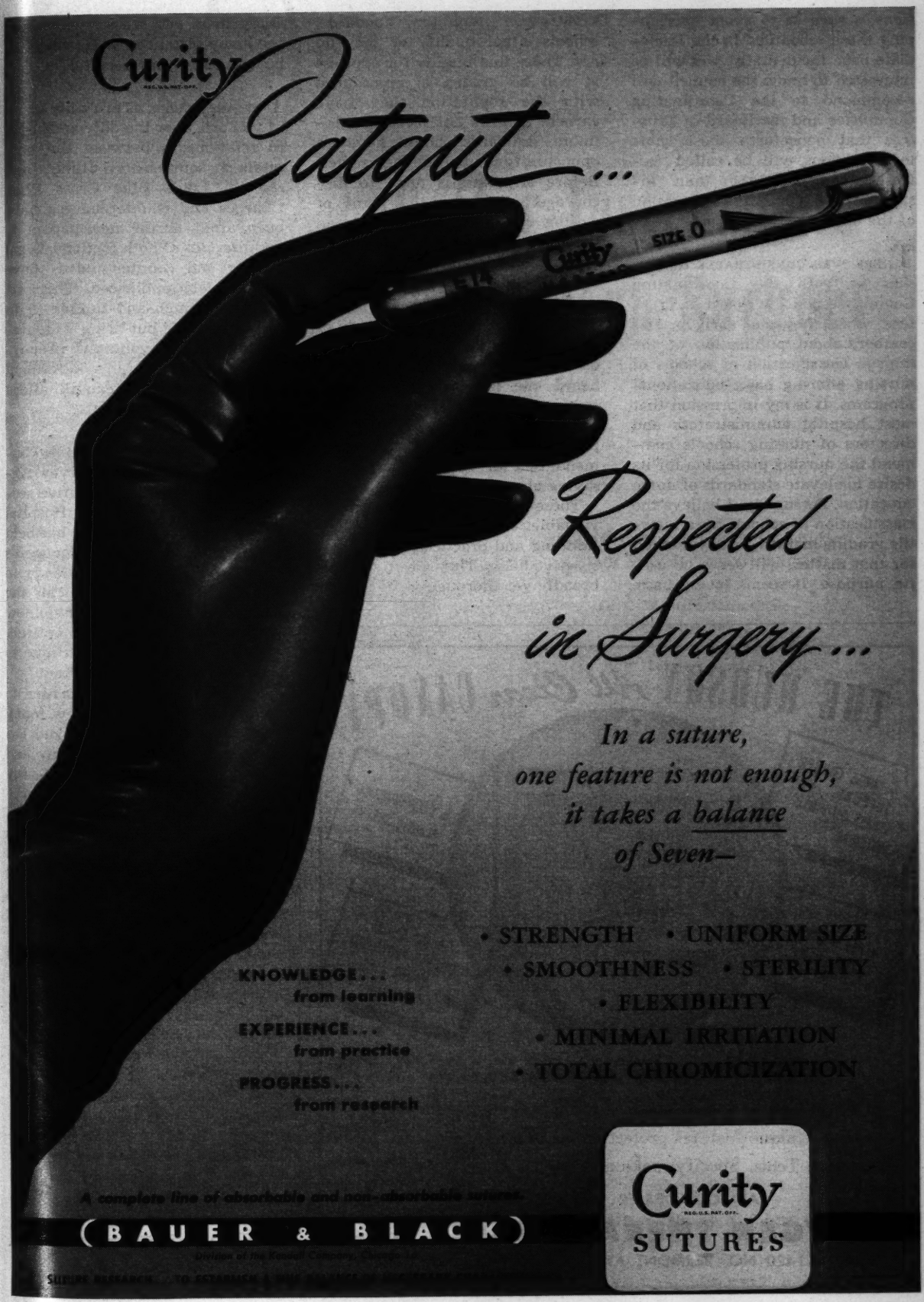
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sions is such as to avoid overlapping those scheduled in the immediate past. Incidentally, you will be interested to know the council will recommend to the Coordinating Committee and the Board of Trustees that henceforth these short term sessions will be called "refresher courses" rather than "institutes" to avoid misinterpretation of the objective.

THERE WAS CONSIDERABLE discussion in both the Coordinating Committee and the Board of Trustees, when they met early in December, about publication of the interim classification of schools of nursing offering basic educational programs. It is my impression that most hospital administrators and directors of nursing schools commend the nursing profession for its desire to elevate standards of nurse education. Personally, I believe the classification of schools by a quartile grading method, or any method for that matter, will serve no useful purpose. It seems to me basic that, given minimum standards, schools either qualify or they do not. Those that qualify for approval will be graded in accordance with the reputation they have earned. Schools not meeting minimum standards should have an opportunity to upgrade themselves. Before anything is done to discourage schools to the point of closing we should concentrate on the overall problem of the development of adequate nursing personnel of all types for patient care.

I HOPE GOOD USE is being made of the recently distributed "Manual on Hospital Laundry Operation." I heard one hospital administrator say, not long ago, that by making only one adjustment in his laundry procedure, in line with a recommendation of the manual, he is saving about $250 a month.

These Association manuals are valuable and represent the best thinking and practices in their respective fields. They cover subjects broadly yet thoroughly. Be sure to study them and see for yourselves the many instances where they can be applied in your hospital.

I AM DISTURBED, as probably many of you are, over the outward break in relationship between the hospitals in southeastern Illinois and the St. Louis Blue Cross Plan. Charges and countercharges have been aired in the newspapers to the discredit of both factions. Legal actions and counter moves have been widely publicized. This sort of open rough-and-tumble fight can do nothing but bring irreparable harm to the voluntary prepayment hospital insurance movement at a time when it can ill afford such a shock.

ON one of my recent visits to Chicago I learned of Dr. Harvey Agnew's resignation as executive secretary of the Canadian Hospital Council, which position he has held with distinction since the council's origin in 1931. To his friends in the hospital and medical fields the world over it is comforting to know he is not embarking on an entirely new endeavor but will continue to serve hospitals as a consultant.

I consider it my good fortune to have known Harvey Agnew many years as a friend, adviser and coworker. His talents are many and varied. He labored indefatigably for the betterment of hospital service, particularly in this country and Canada. His organizing ability has been recognized and appreciated widely. His accomplishments stand as an enduring monument to his versatility, constructive thinking and initiative. As editor of *The Canadian Hospital*, as a writer, as a teacher, as a physician and as an artist he has served his fellow man outstandingly well and unselfishly. He has earned and received many honors, not the least of which was the presidency of the American Hospital Association. We thank Harvey Agnew for what he has done for us and we wish him happiness and success in his new endeavor.

John N. Hatfield, President,
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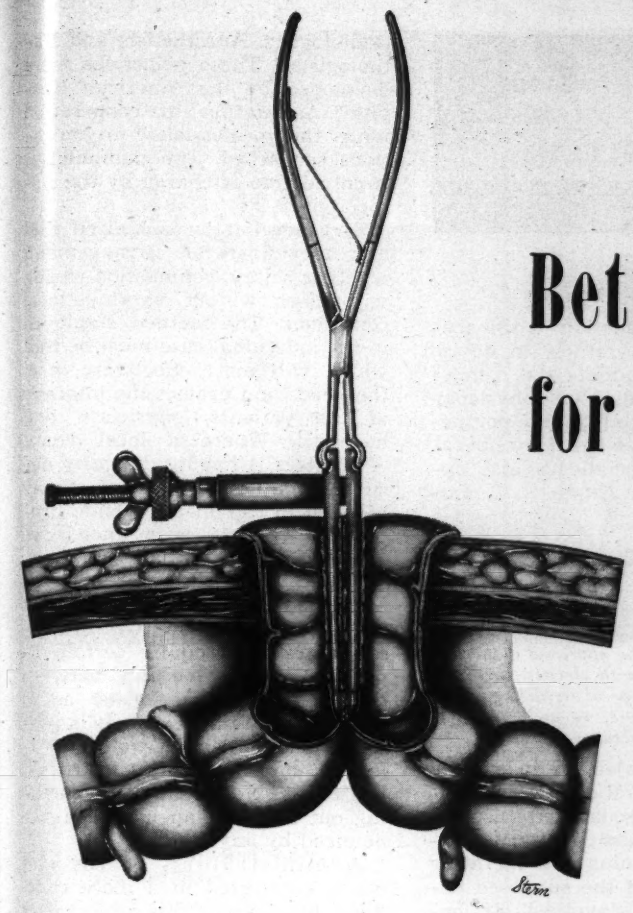

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Standards for chiefs

Our hospital is interested in setting up standards for chiefs of service. One article on this subject states that chiefs or heads of various staff sections usually are required to be diplomates of their respective boards and fellows of the American College of Physicians or the American College of Surgeons. Has the Council on Professional Practice of the American Hospital Association established standards for the appointment of chiefs of service?

The council has not established a separate set of standards but adheres to the hospital approval programs of the American Medical Association and the American College of Surgeons. A resolution recently adopted by the Council on Medical Education and Hospitals of the American Medical Association states:

"It was never intended that staff appointments in hospitals generally or even in hospitals approved for residencies should be limited to board certified physicians as is now the policy in some hospitals. Such policies, if practiced extensively, are detrimental to the health of the people and therefore to American medicine. Hospital staff appointments should depend upon the qualifications of physicians to render proper care to hospitalized patients as judged by the professional staff of the hospital and not on certification or special society memberships."

A resolution concurrently adopted by the American Board of Surgery and the Advisory Board of Medical Specialties states:

"The American Board of Surgery is not concerned with measures that might gain special privileges or recognition for its certificants in the practice of surgery. It is neither the intent nor has it been the purpose of the Board of Surgery to define requirements for membership on the staff of hospitals."

The obvious tenor of these resolutions is that certification by specialty boards is not intended to be the only consideration for appointment either to the staff of a hospital or as a chief of service. The apparent function of the specialty board is, rather, to devise standards to evaluate the competence of the individual physician. Physicians of ability and competence should have equal consideration for staff privileges and appointment.—DR. CHARLES T. DOLEZAL.

Electric sterilizers

We are planning to build a 30-bed hospital next spring, to be partly paid for by a federal grant. We have been told that the grant will not be approved if the hospital is equipped with electric sterilizers. Since this is the type of sterilizing equipment we plan to use, we are anxious to learn if this information is correct.

We see no objection to electric sterilizers. Federal engineers, however, have discouraged use of electric sterilizers in rooms immediately adjoining the operating room because of the supposed explosion hazard involved. It has been recommended frequently that electrical sterilizing equipment be relocated in a room not directly connected with the anesthetizing location.

The National Fire Protection Association in October adopted a new set of recommendations for reducing anesthetic explosion hazards. A discussion of the new recommendations appeared in the December 1949 issue of HOSPITALS. There should be nothing in these new recommendations to prohibit the use of electrical sterilizers in rooms adjoining the anesthetizing location when they are reflected in federal requirements.—ROY HUDENBURG.

Payment of specialists

What is considered a fair basis of compensation for the hospital radiologist, pathologist and medical anesthetist?

The financial arrangements to be made between the individual hospital and the specialists mentioned present one of the most difficult questions of hospital administration. The most authoritative guidance available is set forth in the pamphlet, "Principles of Relationship Between Hospitals and Radiologists, Anesthetists and Pathologists." These principles were developed by the American Hospital Association in cooperation with the professional organizations concerned. The pamphlet is supplied free of charge by the Association.

In general it is recognized that no one financial arrangement, whether salary, commission or fee, will meet widely varying local conditions. The method employed in the individual case must be that which will most effectively meet the needs and protect the interests of the patients, physicians and hospitals. Where a local board of trustees is having difficulty deciding on a fair adjustment, it may be wise to call in an outside professional adviser with knowledge of the practice in other communities.

It has been suggested that specialty boards approving residency training require certain financial arrangements between hospitals and specialists as a prerequisite to approval. It is possible that such action would be illegal under federal antitrust legislation. No intention of carrying out such a plan has been announced by any board.

Administrators, boards and others interested in a more complete discussion of this subject may obtain the booklet, "Readings—Hospitals and Radiologists, Pathologists and Anesthesiologists," on loan from the Association library. This includes a reprint of the "Principles of Relationship" pamphlet together with a collection of 18 other articles on the topic from hospital and medical journals.—GEORGE BUGBEE.

Sterilization solution

What is the name of the most widely used cold sterilization solution?

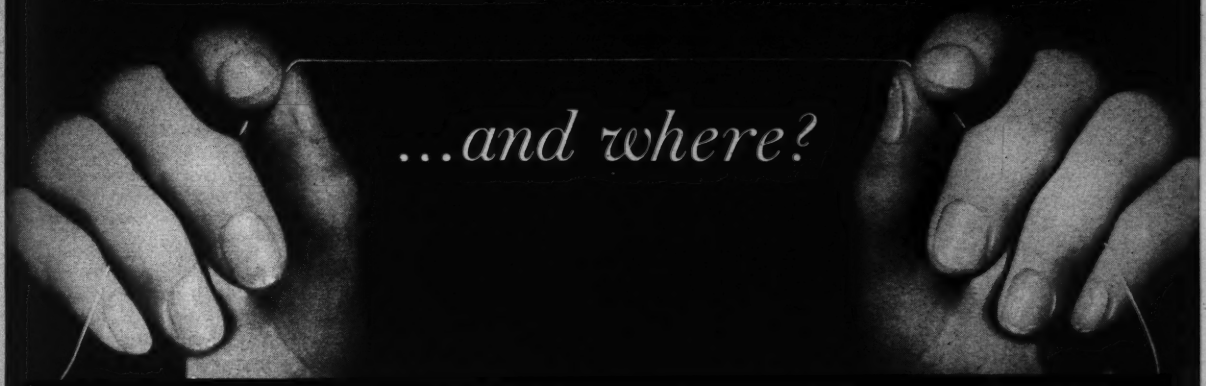
Quaternary ammonium compound is the most widely used cold sterilization solution. It may be purchased from any of several companies under one brand name or another.—LEONARD P. GOUDY.

Cost accounting

In determining area as the basis for apportioning "operation of plant" expenses, how is corridor area allocated? Are there other accepted methods of cost apportionment besides the square foot basis?

Since no two hospitals are exactly alike in design, it is difficult to give hard and fast rules for determining the area basis for costing purposes. In general, how-

Which suture will break first—



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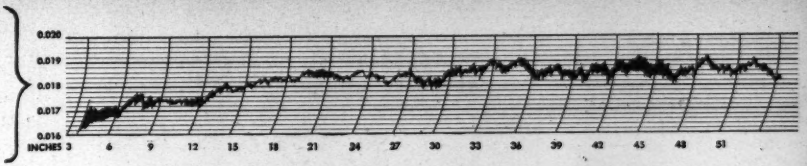

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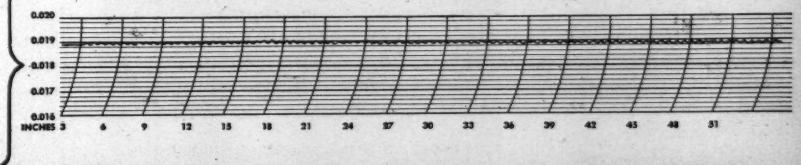

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ever, corridors are excluded when such spaces pertain to more than one department or function. When such an area relates to only one costing center, it is usually included in the total area for the center.

Where, for example, a corridor serves the rooms of private patients, semi-private patients and ward patients, it is general practice to exclude the corridor. However, if each of these three categories of patients occupied a separate floor or wing, the area of corridors would be included. The wisest course is for the individual hospital to analyze its own layout, and then adopt an equitable and simplified method of measuring the space.

There are other bases for apportioning "operation of plant" expense which may be more accurate than the square foot basis. Expenses for electricity, gas, water and other items may be apportioned on the basis of meter readings or estimated consumption in the various departments. Where expenses of maintenance and repairs are included in "operation of plant," they can be apportioned on the basis of job orders or employee hours of service to each of the hospital departments.—WILLIAM H. MARKEY JR.

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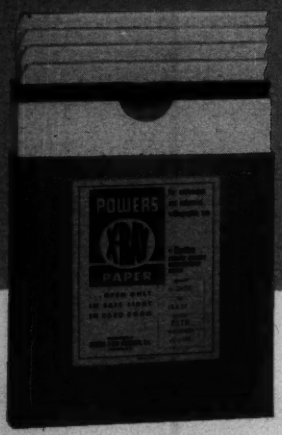

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Medical Records

Certain questions regarding medical records have arisen in our hospital. May lay secretaries obtain histories by filling in a printed form provided by the record committee? May medical students do histories and physicals? Are typewritten histories that have been dictated through a mechanical aid permitted?

Histories may be obtained and certified to only by a physician. Because of the intern shortage, many physicians now write the patient's history during the interview in their office and submit this to the hospital as the patient's record. A device like the Cornell medical index also may be used. This system is described in the June 11, 1949, issue of the *Journal of the American Medical Association.*

Under supervision, medical students in a teaching hospital or serving as externs in a nonteaching hospital, may do histories and physical examinations. Such records, however, must be reviewed and attested to by the attending physician or a member of the house staff.

Typewritten histories that have been dictated through a mechanical aid are acceptable when reviewed and certified to by the attending physician.—DR. CHARLES T. DOLEZAL.

Written orders

The director of nurses at this hospital has suggested that the doctors be asked to write all routine orders for nurses. Are there any books that contain information on the legality of word-of-mouth orders to nurses as opposed to written instructions?

There are two books that include material on the legal aspects of routine orders for nurses. These are: "Law of Hospital, Physician and Patient," written by Emanuel and Lillian R. Hayt in 1947 and published by the Hospital Textbook Company, New York City; and "The Nurse and the Law," written by G. Harrison and published by the F. A. Davis Company, Philadelphia, in 1945—HELEN V. PRUITT.

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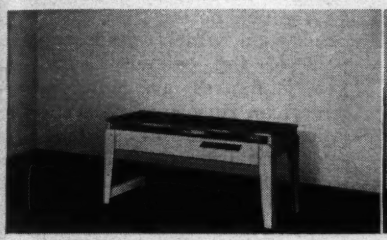

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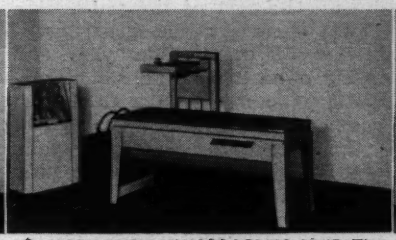

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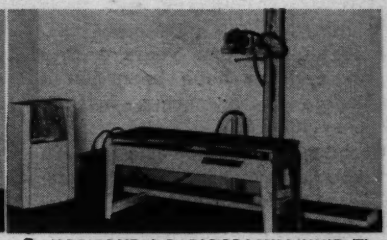

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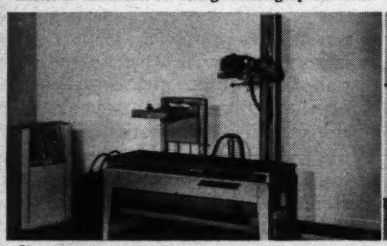
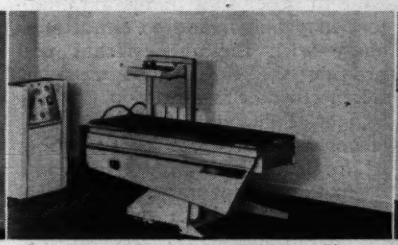
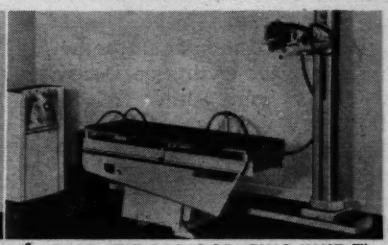


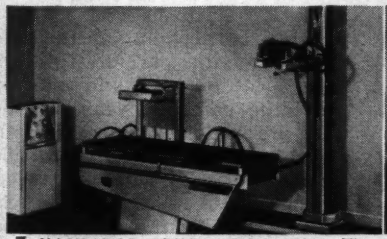
4. HORIZONTAL COMBINATION UNIT. For those who prefer a horizontal table to serve for both radiography and fluoroscopy this Maxicon combination unit is functionally unlimited. One tube serves as the x-ray source both over and under the table.



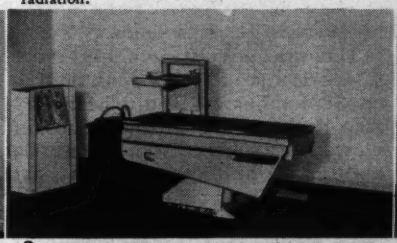
5. HAND-TILT FLUOROSCOPIC UNIT. Fluoroscopy from Trendelenburg to vertical is easily accomplished with this unit in the Maxicon series. Equipped with the spot-film device, an even greater range of service can be yours. Panels in the table-front opening shield you from scattered-radiation.



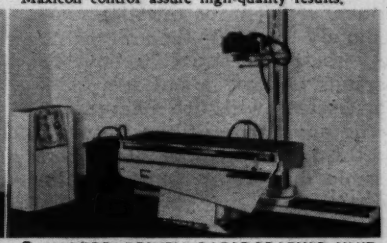
6. HAND-TILT RADIOGRAPHIC UNIT. The angulating table provides every convenience and facility to make radiography in angular positions an exact procedure. Manual raising of the table is effortless, supplemented by the power of a counterpoising spring. The 100-ma generator and Maxicon control assure high-quality results.



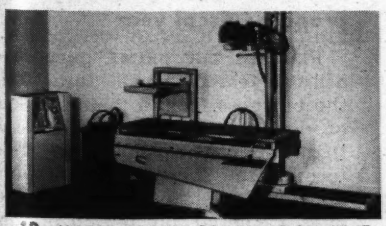
7. HAND-TILT COMBINATION UNIT. The separate features of the radiographic and fluoroscopic models are embodied in this combination unit. It can quickly and conveniently be adapted to every type of x-ray examination. Its outstanding flexibility permits the use of one tube for radiography and fluoroscopy.



8. MOTOR-DRIVEN FLUOROSCOPIC UNIT. Foot-pedal angulation of the table affords complete fluoroscopic convenience. The operator's hands remain free, for palpation of the patient and manipulation of screen and shutter controls. Scattered-radiation protection and an automatic field-limiting device are important features.



9. MOTOR-DRIVEN RADIOGRAPHIC UNIT. The variable-speed angulation of the Maxicon table is controlled by two conveniently located foot pedals. All degrees of tilt from Trendelenburg to vertical are self-retaining for radiography in any position. A complete range of power and capacity are provided by the rotating-anode tube.



10. MOTOR-DRIVEN COMBINATION UNIT. The composite of x-ray facilities in this combination unit equips you for complete radiographic and fluoroscopic service. The separate rotating-anode tube units increase the capacity of a busy department. The 200-ma generator and Maxicon control contribute the means for obtaining high-quality results accurately and routinely.

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ON ADOPTING A NEW FISCAL YEAR

NOT ALL HOSPITALS end their fiscal years on December 31. For various reasons, years ending on other dates have been found preferable in numerous institutions.

Because of these variations in practice, a group of hospital administrators was asked the following question:

"In the interests of uniformity, especially for statistical purposes, it has been proposed that all hospitals be encouraged to adopt a fiscal year that ends September 30. Do you believe this would be better than a year ending on December 31 or some other selected date?"

Replies from four administrators follow:

The advantages of a calendar year basis are greater

IN DISCUSSING the matter of a universal practice among hospitals of adopting a fiscal year ending September 30, three questions immediately present themselves to me. First, is it desirable to have all hospitals observe a uniform fiscal year; second, will such a date work to the advantage of the hospital; and third, is September 30 the best possible date for closing hospital books?

To answer these questions in reverse order, I should like to speak for the small, specialized hospital with which I am presently connected, because it may be typical of other institutions. This institution experiences a marked decline in occupancy in the first and last months of the year which enables us to do a great deal of bookwork that might be impossible in the fall. Granted that this is the case in a single instance, observation leads me to believe that in all hospitals, general as well as special, the absence of the patient with elective work to be done at the close of the calendar year affords the accounting office and the administrative authorities that invaluable asset *time*, which is so scarce during the rest of the year. This aspect alone is a strong argument in favor of the calendar year, and to my mind it outweighs such advantages as may accrue to a fiscal year ending in the fall.

To answer the second question, with hospitals receiving revenue from such diverse sources as the federal government, state governments, municipalities, corporations and trusts, it would seem to be advantageous to consider the fiscal dates of the agency providing revenue in order that budgetary matters may be considered simultaneously with the agency that will provide the funds that must be taken into consideration in the budget. This may not prove to be either September 30 or December 31, however. It is a matter of prime importance inasmuch as a fiscal year that makes it necessary to prepare budgets for the hospital prior to assurance, from the agency providing the funds, that such money is available, could prove to be disastrous to the hospital budget. Any date selected must necessarily consider this point.

The sole advantage that occurs to me is that a fiscal year ending on September 30 would be desirable from an auditing point of view, chiefly because of the availability of public accountants at that time. Once again I am speaking generally, since it is entirely conceivable that a local firm of accountants may have its heaviest duties concentrated in the fall. I will admit, however, that it is rather improbable that they would be busier in October than they are prior to the middle of March.

The standardization of the hospitals' fiscal years is not necessarily a great advantage as I see it, except in reporting to such agencies as the American Hospital Association or the American College of Surgeons. Figures would be more comparable in that they would represent expenditures and receipts for identical periods. While this is an advantage, it strikes me as insignificant in view of the opinions expressed above.

The calendar year appears to me to be highly advantageous.—A. P. RICHARD II, *director, Eye, Ear, Nose and Throat Hospital, New Orleans.*

Change is improvement for auditing and statistics

I FAVOR A FISCAL year ending September 30 because: (1) It is possible to secure the services of a public accountant at this time of year much better than during the tax season, which falls in the early part of the calendar year; (2) yearly figures are available for American Hospital Association and American Medical Association questionnaires; (3) hospital directories will have more current data because it is possible by December to give fiscal year figures in answering questionnaires of national organizations; (4) financial data and annual statistics for the year ending September 30 are available early in December and it is then possible to approach industries and individuals with the hospital's financial problem prior to the close of their fiscal or tax year. Many individuals are interested in planning their giving for tax purposes during December. The American Hospital Association booklet, "Reduce Your Taxes," is timely to mail to prospective donors with annual financial results and appeals for contributions.

Regardless of one's fiscal year, it is wise to set up a system for gathering statistics that makes it possible to accumulate them for any 12-month period. This will save a lot of time and effort in providing calendar year statistics that are required in certain instances and also service statistics for the year ending June 30, which are helpful in relationship to residencies that, for the most part, begin July 1.—OLIVER G. PRATT, *executive director, Rhode Island Hospital, Providence.*

Little would be gained by proposed fiscal year

PERHAPS THE PRIME purpose of a fiscal year closing is to appraise the business from a financial point of view and, in organizations other than nonprofit corporations, to determine tax liability and other financial and statistical information over a comparable period of time. In the canning industry, for example, the fiscal year is generally set in relation to the seasonableness of the major product processed and sold. Again, in the field of depart-

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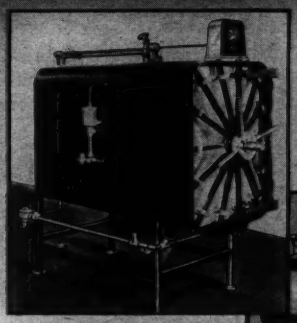

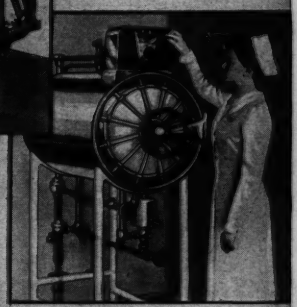

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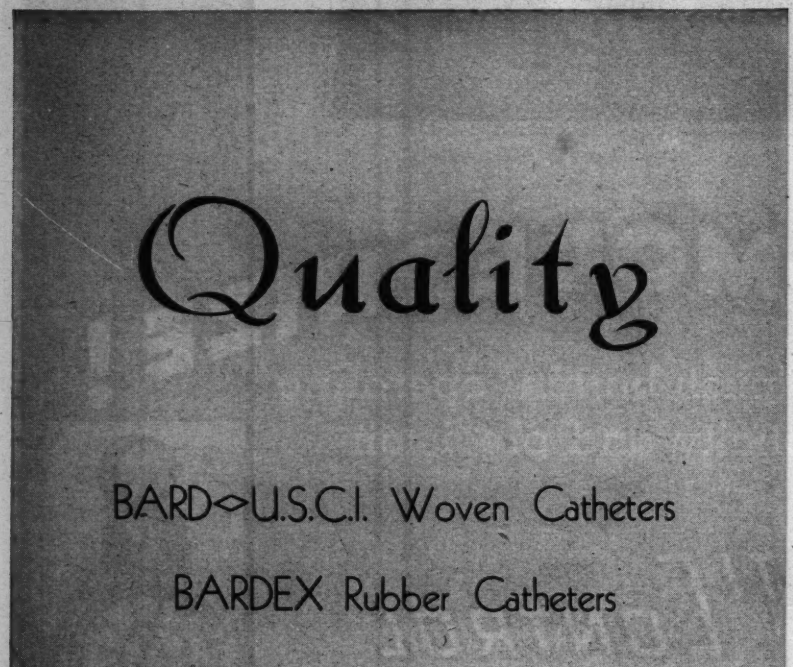
ment store operations, the fiscal year is generally a date other than December 31, because of the uncertainty of Christmas sales and returns following the holiday, not to mention the tremendous problem of taking inventory.

Hospitals, however, are not seasonal in the sense of processing and marketing a product and there is no great fluctuation in the demand for the service they render. They are not impelled by these reasons to adopt a fiscal year ending on a date other than December 31. In general, the main task in the ending of a fiscal year is the financial appraisal of the hospital and the presentation of comparable statistics for prior years. This can be done on December 31 just as easily as on any other date.

Public accountants favor a year end closing date in the summer or fall because this is their slack season and they are anxious to have more jobs during these seasons to even out their business load. This, however, does not appear to be sufficient reason for changing the fiscal year.

One of the important aspects of a hospital year end is the solicitation of gifts from friends and former patients whose personal income tax year is the calendar year. This giving, which seems to be most natural at Christmas time, provides the hospital with this appeal plus the encouragement of helping the hospital to end the year in a financially sound position.

I personally favor the calendar year as the fiscal year because it seems to be the natural time to end a year of activity and to look forward with anticipation to the new.—LESLIE D. REID, *superintendent, Presbyterian Hospital, Chicago.*



Three reasons for ending fiscal year June 30

SELECTION OF an annual accounting period other than the calendar year is strongly recommended for businesses which display evident seasonal fluctuation in activity. By adopting such a natural business year, the probability of more complete and reliable financial statements would be greater, since incomplete business at that point should be at a minimum. The problem, as I review the matter, is this: What is the lowest point of activity in the hospital year? If September 30 is the low, then this is the date to be recommended.

We now use a fiscal year that ends on June 30. It has several advantages: (1) Since this period represents half a calendar year, it easily lends itself to preparing reports and statistics on either a calendar or fiscal year basis; (2) auditing firms are not so busy at that time of year and are more available, which means better and more complete service; (3) many hospitals in this area, and I imagine in other areas also, already have fiscal years that end June 30. Hence, fewer changes of a fiscal year date among hospitals would be required. This would also be in line with state and federal fiscal years.

The University Hospital, like the university and the state of Michigan, has a fiscal year that ends on June 30. We, therefore, could not change our fiscal year and, undoubtedly, there are many other hospitals, state, county and municipal, that are in similar positions. —ALBERT C. KERLIKOWSKE, *director, University Hospital, Ann Arbor, Mich.*

New York City's long-range program for EXTENDING HOSPITAL CARE INTO THE HOME

MARCUS D. KOGEL, M.D., AND ALEXANDER W. KRUGER, M.D.

THE MUNICIPAL HOSPITAL system of the City of New York is faced with the greatest overcrowding in its history. This condition is aggravated by obsolescent hospital facilities and by a serious shortage of nurses. Out of these conditions have come several possible solutions, one of which is the extension of hospital care into the home.

Under a beneficent municipal administration it has been possible to inaugurate a tremendous program of construction to provide modern hospitals embodying the best thinking in functional hospital design and hospital practice. But the new construction is mainly a program of replacement and by itself does not solve the problem of an overwhelming hospital population.

The home care program is one prong of a four-way approach to this problem. Another important plan calls for reorganization of outpatient services so that effective diagnostic and therapeutic work can be done on an ambulatory basis. This has the potentiality of saving thousands of beds. Another expedient is the elimination of the bottlenecks in x-ray and laboratory services. The development of rehabilitation facilities and a dynamic approach to the problem of long-term illness is still another good method for reducing the hospital stay of long-term patients.

Dr. Kogel is Commissioner of Hospitals and Dr. Kruger is general medical superintendent, Department of Hospitals, New York City.

In instituting our home care program, we decided upon an initial operation in five hospitals. Four of these are general hospitals—one in each of the four more populous boroughs—and the fifth is a chronic disease hospital. The institutions we selected are the Kings County Hospital in Brooklyn (general, capacity 2,050); Bellevue Hospital in Manhattan (general, capacity 2,450); Queens General Hospital in Queens (general, capacity 590); Morrisania Hospital in The Bronx (general, capacity 470); and the Goldwater Memorial Hospital on Welfare Island (chronic disease, capacity 1,500).

OBJECTIVE AND BACKGROUND

The objective was to determine the special problems that would be posed by patients placed on home care after unusually prolonged residence in institutions. This was to be followed, in about six months, by the establishment of similar services in eight of the remaining nine general municipal hospitals, which represent a combined bed capacity of nearly 3,700 beds, excluding bassinets.

Actual operation of the five-hospital "pilot program" began on December 1, 1948, and this report is concerned with our experience during the six-month period ending May 31, 1949.

By definition the Home Care Service of the Department of Hospitals of the City of New York provides modified hospital service in the home of the indigent and clinically suitable patient who has been transferred there from the hospital ward. If it were not for this service, such a patient would continue to occupy a hospital bed for varying periods—from two or three weeks to several months.

It should be pointed out that the concept of hospital care extended into the home is not a novel one. It was recommended in 1933 by Mary C. Jarrett and was discussed by the Haven Emerson Committee in its "Hospital Survey for New York" in 1937. However, except for a modified and short-lived program for terminal cancer patients instituted in 1933 by the New York City Cancer Institute, a municipal facility, no such organized service was operated by a hospital until 1947 and 1948. It was then that the home care "pilot programs" of the Montefiore Hospital, a voluntary institution, and Bellevue Hospital, a municipal institution, were begun.

It is essential that a precise dis-

JUST BEFORE being transferred to the Home Care Service, the patient receives a thorough examination in the hospital. An ambulance is waiting to take him home.

tinction be made between this modern technique, as we practice it, and those types of "home medical care" or "visiting medical service" which, although provided for more than a century in New York, Boston and other cities, are essentially extensions of outpatient services.

The New York Dispensary, when founded in 1790, provided that "those patients who are not well enough *to come to the dispensary* will be visited at home." In 1796, the Boston Dispensary instituted the same practice and continues it to this very day. In point of fact, many large cities of our country provide some variant of this visiting medical service for the indigent dispensary patient.

In 1940, an experimental, grant-supported home care program was started by the Syracuse University Hospital, Syracuse, N. Y., under the supervision of Doctors Weiskotten, Frode and Thomas, but it was concerned with the after-care of the *discharged* patient and not with the patient who, but for this service, would require a hospital bed.

In January 1947 the Montefiore Hospital of New York (aided by special grants from the Greater New York Fund and from the New York City Cancer Committee) put into operation a home care program which is still functioning and concerning which several reports have been published by Dr. E. M. Bluestone and Dr. Martin Cherkasky.

In January of 1948 our own Bellevue Hospital instituted a limited pilot home care service operated under the auspices of the New York University College of Medicine, through a research grant from the Milbank Foundation. The project extended only through 1948 and was successful in reaching its objective as an experiment. A comprehensive report was published by Doctors Unterman, DeGraff and Meleney.

The home care program discussed here is distinctive in two basic features:

1. *It includes a medical visiting service which is continuous with that provided within the hospital ward.* Medical visits to the home are made by those members of the resident staff who have had frequent contact with the patient while in the ward. The resident staffs in medicine, surgery and pediatrics are augmented to make possible these additional duties.

2. *No attempt is made to limit clinical eligibility for home care to the long-term patient.* Our aim is to provide this service for any indigent patient whose clinical requirements can be met by the extension of hospital services into the home.

STAFF ORGANIZATION

The plans for both staff and procedural organization are still preliminary and will be subject to constant modification as the growing experience indicates.

The present staff organization consists of two major divisions: (1) Departmental (or central) and (2) institutional (or local).

1. Departmental

A. Under the supervision of the Commissioner of Hospitals, a designated *general medical superintendent* is in direct administrative control.

B. A *supervisor of home care nursing* handles all nursing activities connected with the home care service and provides liaison with the visiting nurse services (both voluntary and municipal).

C. *Directors of departmental staff divisions* have collateral responsibility for such of those services as are required in the home care service, for example, nursing, social service, rehabilitation, dietary, personnel, audit and financial investigation.

2. Institutional

A. *Deputy medical superintendent for Home Care Service,* under the administrative control of the medical superintendent of the hospital, supervises the operation of the home care service in all its phases and activities.

B. *Resident physician for home care* cooperates with the clinical services in the selection of ward patients and supervises the scheduling of physician and nurse visits as well as the supply of various hospital therapeutic and diagnostic services.

C. *Assistant residents* are appointed to the clinical services of medicine, surgery and pediatrics, as additions to the usual staff. Exactly the same prerequisites are required and the same training and credits are provided. All assistant residents are available to make visits to the homes of the patients in accordance with a scheme of rotation and on a schedule which provides that each assistant resident visit those patients with whom he has had clinical contact.

D. *Coordinating nurse* acts as local liaison officer between the hospital and the visiting nurse service, and facilitates various hospital nursing functions required in

the process of preparing and transferring the patient to his home.

E. *Medical social workers* make careful evaluation by inspection and interview of the patient's home conditions (including social, physical and financial factors) and continue contact with the patient, as needed, on a case-work basis.

F. *Physiotherapy technicians* provide prescribed physiotherapy in the home.

G. *Occupational therapy aides* provide occupational therapy in the home as prescribed. (The number of medical social workers, physiotherapy technicians, and occupational therapy aides to be assigned to each home care service is determined by a formula which provides one of each for every 50 home care patients.)

H. *Stenographers* (two) and *clerks* (one or two) care for the stenographic, typing, filing and clerical needs.

I. *Chauffeurs* (one or more) operate the vehicles for transportation of doctors and others to and from the homes of patients.

PLAN OF OPERATION

1. Eligibility of patient: There are three requisites for eligibility which must be met in every instance:

A. *Suitable clinical condition.* Every estimate of such suitability must be approved by the visiting staff.

B. *Suitable home.* This is to be the pooled judgment of the medical social workers, visiting nurse service and financial investigation office.

C. *Medical indigency.* This is defined as the financial inability of the patient to pay for professional care.

2. Selection of patient: The first step, of course, is the determination that a patient has reached a clinical condition which, although not permitting discharge, permits the kind of hospital care that can be provided in the home. This is arrived at by cooperative consultation between visiting and resident staffs of the clinical service and the resident for home care.

The next step is notification of the social service. This initiates an investigation of the patient's home conditions and financial background. If, for instance, there is no home, or if the home is unsuitable, the patient is rated ineligible. If found suitable, however, the next step is consideration by the evaluation committee. This committee consists of the deputy medical superintendent as chairman, the home care resident, the coordinating nurse and the medical social worker.

Approval by this committee is followed by notification of the visiting nurse service. The patient then is transferred to his home and articles such as a hospital bed, mattress, basins and medications are supplied where needed.

3. Records: Since the basic concept is that the patient is not *discharged* but merely *transferred* to the home (which in a sense then becomes a part of the hospital) the case record is not closed but is forwarded to the home care office where it continues in active use.

4. Scope of service:

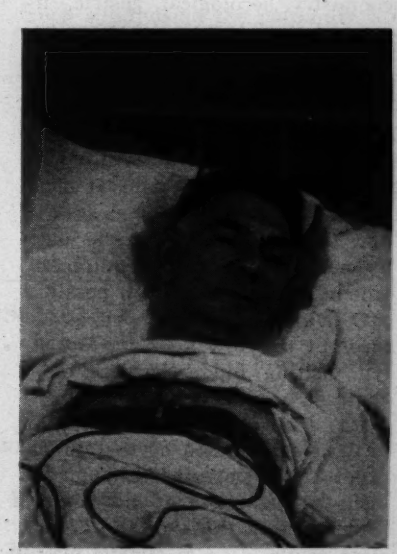
A. *Medical care.* Medical visits to the home by an assistant resident are made as often as necessary. An estimated frequency of visits is prescribed prior to the transfer of the patient to the home, although the doctor is instructed to modify this schedule in accordance with the clinical requirements of the patient. The physician makes clinical progress notes in the hospital case record, which is kept "alive" during the entire period the patient is on the home care service. Should a complication arise, consultations are promptly arranged by notification of the service concerned. The consultation is answered first by the resident of the responding service, who decides whether or not the patient is to be returned to the hospital. He renders necessary emergency treatment.

When the patient progresses to the point where he may be discharged as cured, home care service ceases, and his chart is closed and filed.

When a patient progresses to the point where he is ambulatory and can continue to receive required treatment in the outpatient department, he is discharged from inpatient care and referred to that department.

THE PATIENT is carried into his own home, where he continues to receive hospital care.

A VISITING nurse calls upon the patient in his home and provides needed nursing service.



SEVERE chest pains bring the physician who had treated him in the hospital. A bedside electrocardiograph machine is put into use.

A HOUSEKEEPER, employed on an hourly basis by the Home Care Service, prepares the patient's lunch, serves it and cleans up. The patient's wife is away at her job.

Deaths while on home care service are handled in much the same way as within the hospital. If the Home Care Service is notified promptly a hospital physician will prepare the death certification. If an outside physician is called, the hospital will give the physician all the information he may require to certify the cause of death. Currently we are working to eliminate the legal hurdles so that it will be possible to return the body to the hospital for autopsy when consent has been obtained.

B. *Laboratory examinations.* Specimens for blood count, blood chemistry, serological, gastric, urine and stool examinations are obtained in the home and brought to the laboratory by the resident physician or a laboratory technician. Electrocardiographic tracings are obtained in the home with a portable machine.

C. *Special therapeutic services* flow from the hospital to the home by means of portable equipment, which is used wherever possible.

D. *Nursing.* Nursing visits are made by the New York and Brooklyn visiting nurse services on a contract basis and by the Department of Health. The frequency of visits is determined by the clinical needs of the patient. Although the visits of the nurse do not always coincide with those of the doctor, close cooperation is always maintained, and the doctor's orders are carried out expertly. Complete records are kept, and reports are forwarded regularly to the hospital for inclusion in the patient's case record.

E. *Housekeeper service.* In many of the homes of the indigent sick the principal lack is that of simple housekeeping. Perhaps the housewife is overwhelmed by the addition of a sick husband to the multitudinous chores of a home and several small children. Perhaps the patient is the housewife herself and there is no one at home to do the housework. We find that the provision of such housekeeper services alone in many instances will make possible the transfer of a patient to home care service. The rate of pay is 75 cents an hour. Recruits most often come from the patient's relatives and friends. The amount of such service is determined by the medical social worker and the visiting nurse.

F. *Social service.* Social service in all its phases is provided as needed, on a casework basis.

G. *Equipment and supplies.* In many instances it becomes necessary to provide items such as a bed, a rubber ring, some basins or a rubber sheet. We are prepared to comply with all reasonable requests for special equipment and supplies which would make possible the transfer of a patient to the home. Included, of course, are all medications and dressings, as well as appliances such as leg braces.

H. *Relief service.* Frequently it happens that the patient being considered for home care had been a client of the Department of Welfare and that allowances were discontinued or modified upon admission into the hospital ward. When such an individual is transferred to his home as a home care patient, the Department of Welfare resumes all necessary relief allowances.

TUBERCULOSIS HOME CARE

Of particular interest is our carefully supervised program for the inclusion of tuberculosis patients in the home care service. We are not particularly "sold" on sending tuberculosis patients back to their homes, but the desperate overcrowding of our tuberculosis facilities has made it necessary.

We selected the Triboro Hospital (a unit of Queens General Hospital) for the initial experiment and began operations on March 31. Rigid criteria were developed to assure against returning patients whose sputum is positive. The following clinical types are considered eligible:

1. Post-operative cases

A. *Resections*

(1) Negative for three months (three negative concentrated sputa, one negative gastric and one negative culture).

(2) No evidence of cavitation on posterior-anterior film.

(3) No complications.

B. *Post-thoracoplasties*

(1) At least three months post-operative.

(2) Rigid chest—no paradoxical motion.

(3) Satisfactory collapse pattern by x-ray.

(4) Marked decrease in amount and improved character of sputum.

(5) No complications.

2. Therapeutic pneumothorax cases

A. *Negative for three months* (three negative concentrates, one negative gastric and one negative culture).

B. *No evidence of cavitation* on x-ray including tomography.

C. *No complications.*

3. Infiltration without Cavitation.

Patients should show negative sputa after initial work-up, (to include tomography).

(Continued on page 62)

A simple collection aid for the small hospital

Follow-up cards, some stock sentences for letters and a courteous but firm approach have brought excellent results.

ROBERT A. ANDERSON

WHERE THE HOSPITAL administrator must be his own credit manager, he needs a simple system that will permit the continuous review of accounts with a minimal expenditure of time. This becomes especially imperative in a time of high operating costs.

Not only must each account be pursued untiringly but the work must be done with sufficient responsible attention to avoid offending the debtors. It is more than a clerical matter demanding firmness, tact and initiative. What is required is a mass-production method with a custom-made result.

FOLLOW-UP CARDS

At the 122-bed Wyoming County Community Hospital, Warsaw, N. Y., we have developed a time saving plan, using subsidiary 3x5 follow-up cards, which has given us excellent results in securing payment from delinquent accounts.

The follow-up procedure starts at the moment of the patient's admission. The admitting officer evaluates the financial situation fully and at once sets in motion the particular machinery that seems indicated. This may be verifying a reference or filing a welfare application. It may be checking with the employer as to compensation status, or obtaining his cooperation for a voluntary wage assignment. It may be securing from the patient an assignment of commercial insurance benefits, or filing a notice of hospital lien.

Rather than burden each patient with an exhaustive credit inquiry, a special credit application is used for any patient who promises to present a collection problem. With every new account, however, the files are searched for old balances to be included in all new arrangements. The payer's agreement must be specific.

It is not our policy to request advance payments. Weekly bills are sent to the payer in cases where the patient is uninsured, is not under welfare aid or is not in the maternity or other short-stay category.

At time of discharge the appearance of the patient or his responsible relative at the cashier's window must be assured. To this end we use a discharge check, which is initiated at time of admission and attached to the face sheet. Prior to discharge the nurse gives this clearance slip to the relative for presentation to the cashier. It must be initialed and returned to the floor before the patient is discharged.

At the cashier's window, the payer either settles the bill in full or verifies arrangements made at admission. If he fails to make good a payment due on discharge, he is referred to a designated member of the office staff. At this interview he must explain the breach of his agreement and offer an acceptable new arrangement with appropriate guarantees.

In our post-discharge collection procedure the first step is the initiation of a 3x5 follow-up card, by the accounts receivable clerk, on each patient who leaves a balance not guaranteed by Blue Cross. On this card she enters concisely the following: Name and address of patient, dates of hospital stay, name of payer, nature of agreement, amount paid and balance. Then, the ledger card is color-coded with tape to indicate that the subsidiary card has been set up.

FILED BY DATE

The follow-up card is placed in a chronological file by the date on which the first notice is to be sent. Because of the necessity for finding these cards readily in order to make note of correspondence or calls regarding the accounts, we found it best not to subdivide for each day of the month but merely at five-day intervals. Within each such subdivision the cards are alphabetized.

When a given date arrives, the follow-up cards are removed from file and compared with the ledger accounts. Any payments that have been credited in the interval are noted, with date of posting, on the

THE DISCHARGE check must be presented at the window of the cashier before the patient departs from the hospital. This check is initiated at the time of admission.

DISCHARGE CHECK

Patient Mrs. Jessie Doe

Floor 3 Discharge Date 4/14/49

BUSINESS OFFICE CLEARANCE

Bill Paid ( ) Arrangements Verified (✓)

Bill to be Mailed ( )

By .....

PATIENT OR RESPONSIBLE RELATIVE IS REQUESTED TO PRESENT DISCHARGE CHECK AT BUSINESS OFFICE AND RETURN IT APPROVED TO FLOOR NURSE PRIOR TO PATIENT'S DEPARTURE

Mr. Anderson is superintendent of the Wyoming County Community Hospital, Warsaw, N. Y.

Dr. Jessie	Box 33, Huntsville			
4/4-14/49	"Bill $25. Monthly No. (25th)"			
James (7)	4/14	$25	Bal.	60.-
5-4-25	4/30	10	—	50
5-5-25	8/19	5	—	45
5-6-5-0	9/20	10	—	35
6-20 ① ②	10/22	15	—	20
7-10 ⑧ ⑨ ⑰	11/21	20	—	Pd.
7-14 "Sorry, no work. May have work first of month."				
7-15 ⑩ ⑪				
8-18 "Enclose $5. Now working. To remit 20th of ea. month."				

THE FOLLOW-UP card contains the patient's financial history. Circled numbers refer to the specific stock paragraphs that went into letters sent to the patient.

follow-up cards. The latter then are directed to the superintendent, who, from the successive notations, is able to size up the status of an account at a glance and indicate by code number the type of notice to be sent, as well as the message contained. A large batch of apparently personalized letters and statements can be originated in the space of minutes.

We use approximately 20 stock paragraphs, which can be combined into letters to fit any common situation. Several of the sentences are employed to add emphasis to the regular hospital statement. Carbon copies of letters are, of course, unnecessary; even when they are dictated the tenor of the communication can be abstracted on one line of the 3x5 card. Our stock paragraphs appear below.

The follow-up card becomes more than a reminder to mail out a statement. It is, in fact, a concise financial history of the patient. Incoming letters are summarized succinctly on the card and thrown away. Outgoing letters are indicated by code numbers or, if dictated, by a terse abstract of the message. A file of correspondence practically never is of interest to the attorney or collector who ultimately may handle an account. An added advantage of jotting data on the 3x5 card is that the ledger card itself is kept free of untidy notations.

Following the discharge of the patient we enter no further information on the ledger card itself other than credits or changes of address. Collection material is contained solely on the follow-up card.

The key to the value of this system is in the fact that these cards are filed by intervals of time. It would not be feasible to code the ledger cards to indicate various dates because successive steps are taken not at definite intervals but as determined by the activity of the account. To attempt any such compromise would result in excessive use of the regular ledger file, causing interference with the work of the accounts receivable clerk.

After a bill or letter is typed the follow-up card is refiled at the appropriate interval. We use approximately two statements and two letters, variously worded, before the ultimatum date. Then, if there has been no payment or explanation, the account is placed with our attorney. The use of registered mail is suggested for

Form paragraphs used in collection letters or on hospital statements

Following are 20 "stock" paragraphs, which form the basis for collection letters at the Wyoming County Community Hospital. The superintendent writes, on the follow-up card, the paragraphs that should be used in individual letters.

O. Overdue

1. As your statements have not been answered in any way, I am obliged to write and remind you of your outstanding hospital balance in the amount of (amount).

2. I shall look forward to hearing from you promptly with respect to the payment of this obligation.

3. As our notices have not been answered, I am obliged to write and request the immediate payment of your hospital balance of (amount). More than ..... months have passed since (discharge) (the last remittance) and I believe this to be ample time for the payment of this small amount.

4. Since (the) (your) discharge (of your—relationship, name) we have sent you repeated notices of the remaining balance of (amount) on your hospital account. We have not yet received the courtesy of a reply.

5. This hospital was, and remains, available to you and your family in time of need. Its doors never close. For its services, it makes no profit. In exchange for ministering to a person's most valuable possession—his health—this hospital asks only that it be repaid the cost of such care.

6. This hospital stands ready at all times to give its services to those in need of them. However, it must recover the cost of such care and treatment.

7. If you would like the opportunity to come in and talk over your financial situation with me, I shall be glad to see you. In any case, I must ask that you take some action respecting your account without further delay.

8. I note that a partial payment

emphasis. The telephone is an excellent medium as far as it goes, but unfortunately the people with whom one deals most in collections rarely have telephones.

Where there is an apparently sincere response from the debtor indicating hardship, we tend to go along with him for some time. Otherwise we feel no compunctions about legal action, even in this community of farms and small villages, in view of the opportunity given the individual to bring his story to us. In fact, it becomes a matter of keeping faith with the majority of patients, who fortunately do pay their bills.

LEGAL ACTION

We turn over an account to our attorney as soon as we feel that our efforts have been exhausted. Generally this means after we have sent four or five notices, including the ultimatum, without a response from the debtor. This takes approximately three months. It is essential that ample notice and opportunity be given, so as to avoid ill feeling, and to save, if possible, the attorney's commission.

While the administrator can handle outstanding credits easily with this system, it should not be considered useful only in situations where he doubles as credit manager. Where there is a credit manager, it may be that a system adapted from the one described would facilitate his routine work and give him more time for special cases where prolonged consideration is required.

Wyoming County Community Hospital
Warsaw, New York

Statement of your account as of May 25, 1949

For Services Rendered $ 50.00

Mrs. Jessie Doe
Box 33
Huntville, New York

PLEASE GIVE THIS YOUR IMMEDIATE ATTENTION.

Dear Patient:

This note is intended to serve as a reminder of your unpaid hospital bill. Although we have been lenient in our demands for payment, we expect this courtesy to be returned by your sincere efforts to settle your account. Also, we do not like to turn our bills over to the collector, believing that the individual will respond if given a fair chance.

A prompt remittance would be appreciated.

Sincerely,

Superintendent

THIS SPECIAL statement is sometimes sent to patients whose accounts are overdue.

has been made, but that statements mailed to you since have not been answered in any way.

9. On (date of last letter) I wrote you concerning your hospital bill of (amount). You have had ample opportunity to communicate with me to arrange a payment which would not burden you. By doing nothing about this matter you give me to understand that you do not honor your obligations willingly. Therefore, if I have not heard from you by (date), I shall be obliged to place your account in the hands of our attorney. When this is done, interest charges are added to the balance.

10. I wish to thank you for your letter of (date), explaining your inability to make payments on your hospital account. I am glad to know that you are aware of your obligation and I trust that your circumstances will soon improve.

11. I should like to request that as soon as you are able you begin making regular payments, even though they may be small, on this account.

12. Since our recent statements have not been answered, I am writing to request the immediate resumption of payments on the remaining balance of (amount).

13. Although the bill was large, a great deal of time has elapsed since your last payment.

14. I note that you paid $—— in (month), but have made no payment whatsoever since that time.

15. It is now more than (length of time) since (your discharge) (discharge of your—relationship, name) from this hospital. You agreed at time of admission to pay (agreement) until the obligation was cleared up.

16. I must warn you that as the signer you are legally liable for all hospital charges on the above account. This agreement will be enforced if necessary.

17. I believe you have had ample time to reduce this indebtedness, but shall wait another 10 days before resorting to legal steps.

18. To be referred to attorneys (date) unless payment is made.

19. Kindly remit payment or explain delay.

20. Imperative that you remit payment or communicate.

Remodeling the operating room to assure safety

E. ATWOOD JACOBS

NEWS ITEMS REPORTING fatal accidents in hospitals during the administration of inflammable anesthetics alerted the management of The Reading (Pa.) Hospital to the possibility of hazards in operating and delivery rooms. The board of managers, preferring safety to sorrow, authorized the administrator to engage qualified technical consultants. A firm of consulting engineers and an eminent physicist were employed to develop specifications for modification necessary to assure the complete safety of surgical and obstetrical patients.

Coincidentally, the departments of surgery and obstetrics had requested the installation of air conditioning apparatus in operating and delivery rooms to induce more rapid recovery of patients, during the hot summer months, as fluid loss would be substantially reduced. Additional advantages would be greater efficiency of the surgical and obstetrical teams and the elimination of two factors that prevent an absolute aseptic technique—perspiration and insects. Conditioned air would improve the working environment, reducing odors, air-borne bacteria and possibly, to some degree, the hazard of static electricity.

FOUR-POINT PROGRAM

The technical advisers, together with the administrator and representatives of the medical and nursing staffs, developed a four-point program, which would eliminate hazards and assure safety. It was recommended that:

1. Conductive flooring be installed and that appropriate devices be attached to operating and delivery room equipment to assure positive contact with such flooring at all times.

2. Apparatus be provided to furnish properly conditioned air and exhaust foul air.

3. Safety regulations be developed and provided with "teeth" for absolute enforcement.

4. Testing methods be employed to completely eliminate hazards.

Fortunately, funds were available to initiate this program, which received the hearty approval of the board of managers in spite of its cost, more than thirty thousand dollars. Four-fifths of this was spent for air conditioning equipment.

Mr. Jacobs is administrator of The Reading Hospital, Reading, Pa.

FLOORING

The building housing our operating and delivery facilities, erected almost 25 years ago, had been constructed of fire resistive materials. Quarry tile flooring had been installed because it is virtually impervious and is easy to maintain, assuring cleanliness and good appearance. Tests revealed, however, that persons or objects standing on this type of flooring were electrically insulated from their surroundings and could retain electrostatic charges capable of producing sparks, which might ignite inflammable gases. This flooring was tested under varying conditions and its electrical resistance ranged between one and two million ohms. Unquestionably, it was the major hazard and urgently required modification. Intercoupling devices had been employed for some years but it was decided that these were not a substitute for conductive flooring.

A search for suitable flooring was begun. We wanted a material that could be laid over existing floors, thus minimizing reconstruction and its inconvenience and expense. We wanted our floor to be such that it would not be damaged by anesthetic and antiseptic solutions and one that would not need waxing, for waxing of a conductive surface will substantially reduce its conductivity. In addition, we wanted a material that would withstand the weight of heavy tables.

The material selected, a magnesium oxychloride, seemed to meet all functional requirements. This is a cement formed by the reaction of copper particles in a gel of mineral salts and oxides, has been used by the world's largest manufacturer of explosives for almost 10 years and has proven wholly satisfactory. It will stand up under fairly heavy loads, and is both conductive and sanitary. Testing revealed that its electrical resistance varied from 25,000 to 100,000 ohms depending upon such conditions as relative humidity, temperature and surface moisture, which is within ranges recommended to eliminate electric shock and static hazards.

Other advantages of this type of flooring are ease of maintenance and its sanitary aspects. Briefly, it possesses a lethal effect that destroys certain bacteria and molds. The application of water produces an effective bactericidal agent that does no harm to its surface.

This flooring is not faultless. If antiseptic solutions that contain inorganic dyes are spilled upon it, the resulting stains cannot be removed. The surgical and obstetrical staff agreed to use antiseptics colored with vegetable dyes to avoid permanent staining of the flooring. Although its appearance is attractive, it is not beautiful.

The grounding of conductive flooring is a moot question to

Believing that "safety is preferred to sorrow," the administrator and trustees of The Reading Hospital made their surgery conform to recommended standards—and they held their costs down.

which experts have given both a "yes" and a "no" answer. Nevertheless, grounding was arranged by imbedding copper wires in the floor during the period of installation. The wiring has been connected to ground through a 100,000 ohm resistance to avoid shock hazard.

A further precaution against shock hazard was the isolation of all electrical circuits entering the surgical and delivery suites. These circuits were insulated through a special transformer to prevent feedback of high voltage. A ground contact indicator has been connected to the lighting panel with a warning pilot light to reveal crossing of circuits or defects in wiring.

Having installed conductive flooring, it was essential to provide all mobile equipment with either conductive casters or drag chains of nonferrous metal to assure electrical contact with the floor. Storage shelves and immobile tables of wood were discarded and replaced with metal fixtures. We preferred stainless steel for such items, as enameled surfaces are not conductive. Anesthesia apparatus has been provided with masks and tubing of conductive rubber. Everything must have proper contact with the flooring and should not be insulated from it. This applies also to personnel, who are required to wear conductive shoes. Table mattresses have been covered with conductive rubber mackintoshes.

Explosion-proof receptacles had been installed some years ago. However, mercury switches were replaced by the explosion-proof type as the former do not meet the requirements of the National Electrical Code.

It was necessary also to rearrange wiring of some of the electrical devices used in the operating and delivery rooms. Several head mirrors, portable lamps and suction pressure devices had been equipped with switches. These were removed as they were definitely a hazard. Such apparatus must be plugged directly into the electrical receptacle.

All motors on small electrical accessories must be of the explosion-proof type. Otherwise, they may not be employed during the administration of an inflammable anesthesia.

Special hazards that cannot be overlooked are portable x-ray apparatus, electric cauteries, diathermy equipment, electrically driven saws and drills, magnets and heated cribs. Such apparatus should not be used when inflammable anesthetic agents are being administered.

AIR CONDITIONING

Air conditioning was installed primarily to induce more rapid recovery of patients during the hot summer months and to improve efficiency of the surgical team, rather than to control relative humidity. There are several cases on record in which anesthetic explosions are believed to have resulted from static discharges in areas of high relative humidity. Several experts have asserted that humidity does not provide a reliable safeguard against explosions. The chief problem associated with the air conditioning installation was to situate and install it so that it would not become an additional hazard.

The specifications required the installation of machinery capable of producing 32 tons of refrigeration. Finding space for the several compressors, condensers, filters and coils in facilities already overcrowded proved a perplexing problem. The operating and delivery rooms are located on the third floor of a four story building, above which is an unfinished attic. Placing the equipment in the attic would have been unduly expensive. It was decided that space should be assigned in two observation amphitheaters, which were seldom used. From these points, conditioned air could be distributed through ducts to five surgical rooms and two delivery rooms. Corridors, work rooms and offices have not been air conditioned.

Outside air is drawn through intake ventilators, filtered, condi-

BEFORE remodeling, the surgery had a nonconductive quarry tile floor. Electric circuits into the surgery were not isolated. Other safety features were lacking.

AFTER remodeling, the air conditioned surgery has a conductive floor, which is tested monthly for safety, as shown above. Other features now make the room safe.

tioned and distributed through a system of insulated ducts. The intake ventilators are constructed to prevent the entrance of rain and snow, and they contain dampers that close automatically when the system is not in operation. During periods when there are no operations or deliveries in progress, the equipment is turned off.

Air is exhausted to the outside by fans installed about seven inches above the floor, equipped with automatic shutters.

Air is not recirculated. It is completely changed 15 to 20 times per hour in the several rooms. Because air is introduced at a more rapid rate than it is exhausted, there is positive pressure in the rooms, which prevents, to some degree, the accumulation of concentrations of anesthetic gases.

The equipment maintains a summer temperature of 80° F. dry bulb and 55% to 60% relative humidity, and a winter temperature of 75° F. dry bulb and 55% to 60% relative humidity. Incoming air is preheated during the winter months. Automatic controls have been provided. The only hand operation required is turning the system on and off.

The entire installation is explosion-proof and complies with the recommendation of the National Electrical Code.

The introduction of the air conditioning system resulted in various operating and delivery rooms being somewhat isolated from offices and supply rooms, as doors had to be closed to maintain proper temperatures and relative humidity. To facilitate convenient and rapid communication, an audible two-way inter-room paging system has been installed.

SAFETY REGULATIONS

The following regulations apply to physicians, nurses and all others entering or working in operating and delivery rooms:

1. Persons dressed in woolen, silk, rayon, sharkskin or nylon outer garments shall not enter these rooms while inflammable anesthetics are being administered.
2. Woolen blankets are not to be used in operating and delivery rooms for any purpose whatever.
3. All persons entering rooms in which an inflammable anesthetic is being employed shall wear conductive shoes which have been tested and approved. Shoes having leather, rubber or composition soles shall not be worn in operating or delivery rooms.
4. New apparatus, including electrical devices, employed in the operating or delivery rooms shall not be used until approved by the administrator.
5. When it is necessary to use Bovie knife, cautery, x-ray apparatus, electrically driven drills or saws, an inflammable anesthetic may not be administered. Such apparatus is identified as hazardous by a band of bright yellow paint.
6. Any physician carrying a lighted match, cigar, pipe or cigarette in the operating or delivery suites shall have privileges suspended for a period of two weeks. Employees are liable to dismissal.

The problem of providing the casual visitor with safe footwear has been solved by providing a stock of sandals of various sizes to which conductive soles and heels have been attached. Sanitation is assured by storage in a cabinet containing a fixture that irradiates these articles with ultra violet light.

A safety program is ineffective unless it is constantly supervised or policed. Those responsible for the enforcement of such a program must assume an almost fanatical attitude and adhere religiously to its provisions.

Costs of safety program

Air conditioning apparatus, including all plumbing, electrical work, ducts and plastering	$26,256.72
Conductive flooring	2,689.00
Grounding devices, contact indicator and insulating transformer	396.19
Explosion-proof light switches	205.15
Communications equipment (explosion-proof)	825.60
Conductive casters, mackintoshes, etc.	747.02
Consulting fees	2,198.59
Total	$33,318.27

Once each month, the administrator or his assistant, together with the electrician, test conductive flooring and all objects that rest upon it to make certain that electrical resistance is within recognized limits. Two instruments are employed, both satisfactory for the purpose. These are a megger and a direct reading ohmmeter. Neither may be used in the presence of inflammable anesthetics. The testing methods are those recommended by the National Fire Protection Association as set forth in Bulletin No. 56, which require that flooring resistance shall measure between 25,000 and 500,000 ohms and objects of furniture resting thereon shall not exceed 250,000 ohms.

A permanent record is maintained of all tests, and the following data is recorded: Date, time, temperature, humidity, measured resistance of flooring and various objects and names of persons making tests.

All flexible electrical cords are examined for breaks in insulation and tightness of connections. Cords that appear defective are discarded, no matter how slight the damage, and are replaced with new material. Some of the rejected items can be repaired and used in nonhazardous areas.

Personnel are questioned about safety regulations to be certain that they know them thoroughly.

Administrators desiring to initiate similar programs are urged to obtain Bulletin No. 56 of the National Fire Protection Association and to study it carefully. Another helpful reference is the 1949 edition of the National Electrical Code. The N.F.P.A. Handbook of Fire Protection would be a valuable addition to the library of every hospital administrator. It is further recommended that a competent consulting engineer be employed to supervise the writing of specifications.

The program described here may appear expensive and beyond the budget of many hospitals. The management of The Reading Hospital, however, considers it a wise investment, and its public relations value is inestimable. If only one accident is avoided, the expenditure has been justified. Safety is preferred to sorrow.

Avoiding baby mixups: Some principles and procedures

This does not happen often—but when it does, all hospitals are affected.

ALTHOUGH MIXUPS of newborn babies in hospitals occur rarely, there are few incidents that can have a more harmful effect upon the individual hospital and upon all hospitals generally. Mixups make sensational reading, and newspapers have been quick to treat them in that manner, even though they seldom have had all the facts in the case.

Because mixups are unfortunate to all concerned, a special committee of the American Hospital Association's Council on Professional Practice, working with Council Chairman Edwin L. Crosby, M.D., director of Johns Hopkins Hospital in Baltimore, drew up a set of principles and recommended procedures as a guide for the identification of the newborn in hospitals. These were approved by the Board of Trustees last December.

When a mixup occurs or is suspected, allegations can come from a variety of sources. Usually it is the parent who complains. Sometimes a physician will allege a mixup. Occasionally a nurse or other hospital employee will report a suspected mixup.

There are any number of methods of identification currently in use. Probably the most common is the use of name beads in necklaces, wristlets or anklets. Some hospitals use wrist or ankle bands or number tapes. Another device is the adhesive back tag. Many institutions record the baby's fingerprints or footprints.

No system is all good or all bad, and none is regarded as infallible. The reliability of any system depends to a large extent upon the persons who administer it.

An incident at a midwestern hospital late last year demonstrates this point. There, two male babies were delivered on the same day by the same physician. Bead bracelets were used for identification, and footprints were recorded. After both mothers had been discharged with their infants, the physician who delivered the babies announced his belief that a mixup had taken place. Both mothers were asked to bring the babies to the hospital for an investigation.

The newspapers learned of the story and soon it was in the hands of the wire services. At the hospital, neither mother said she had suspected a mixup, but the physician reasserted his belief that one had occurred. He recalled that one baby had had a birth marking, and on subsequent visits to each mother's home it had seemed to him that the baby with the marking was with the other baby's parents.

The nurse who had prepared the identification beads was called in, and she admitted that she had prepared both sets of name beads at the same time, before either baby was born. Thus she was not in a position to know whether or not a mistake had been made. She was suspended immediately.

Footprints taken at birth were checked. Footprints and fingerprints of unborn infants are considered of questionable value because of lack of development of whorls and ridges at that stage. In addition, in this instance, the nurse had taken the impressions

incorrectly, and the prints were of no value in identification.

Tests of the blood of the parents and babies then were made. For a variety of technical reasons, blood groupings are not always conclusive, but in this case the blood types of the parents and babies were such that positive identification was possible—and the tests showed that no mixup actually had occurred. As a double check, blood samples were sent to a large clinic in a neighboring city, and the same results were obtained.

This development, however, did not receive the widespread publicity that had accompanied the original allegation. Even though no mixup had occurred, this hospital's public relations may be adversely affected for some time.

PRINCIPLES OF IDENTIFICATION

The Association's "Principles and Recommended Procedure as a Guide for the Identification of the Newborn in Hospitals" is aimed at helping hospitals to prevent these mixups and alleged mixups. The principles read as follows:

1. The hospital should make sure that every newborn infant is properly identified immediately at the time of birth. This should be done in the delivery room before either the mother or infant is transferred from the birth room. Both mother and infant should be removed from the delivery room before another mother is brought in for delivery.

2. Duplicate items of identification should be placed on the infant in the delivery room. These items should be clearly visible and should be used by doctors, nurses and the mother each time the infant is moved.

3. Identification items should show the mother's full name and admission number, sex of infant, date and time of birth, and other definite correlation with the identity of the mother, such as the mother's finger print. Error in the designation of sex should be avoided by use of the term "boy" or "girl".

4. At least two of the identifications should be identical. One of these should be removed when the infant leaves the hospital and should be acknowledged by the mother or person removing the infant. The acknowledged identification should be retained as part of the hospital records.

5. All mothers in the obstetrical department should be informed of the identification system used and of the mother's responsibility to check the identification of the infant each time it comes to her bedside and when she goes home.

6. It should be recognized that the newborn infant's footprints or fingerprints are of little value as a positive means of identification due to the fact that the whorls and ridges are not always in evidence at birth. If infant footprints are recorded, it should be understood that their value is limited largely to souvenir purposes only.

IDENTIFICATION PROCEDURE

Identification items: (1) Duplicate items of identification are fastened on the wrist(s) or ankle(s). (2) Appropriate items are: Tapes which may be tied or sewed, waterproof and oilproof bands, or any similar identification device upon which the required information in Principle 3 is recorded.

Delivery room: (1) Items of identification are prepared individually for each infant by the supervising nurse in the delivery room. (2) All items of identification are secured to the newborn infant immediately upon delivery. (3) Before taking the infant to the nursery all identification items are checked by the supervising nurse to see that the name of the mother, her admission number, the date and time of delivery, and the sex of the infant (boy or girl) are recorded. Simultaneously the same identification information is placed upon the infant's birth record.

Newborn nursery: (1) When the infant is brought into the newborn nursery, the labor or delivery room nurse and the nursery nurse check to see that the information on all identifications and on the infant's birth record is identical. The sex of the infant is verified, and both nurses sign the infant's birth record. (2) The crib card is filled out by the nursery nurse, who affixes it to the infant's crib. (3) Infant identifications and crib cards are checked each time the infant is either removed from or returned to the crib.

Presentation to the mother: (1) On the first presentation of the infant to the mother, the method of checking and identification procedure is explained, and the mother is instructed to check the infant's identifications each time she receives the infant. The sex of the infant is demonstrated to the mother. (2) When carrying infants to mothers, only one infant is taken at a time. (3) Each time, before giving her the infant, the nurse speaks the mother's name, announces the name and sex of the infant, and waits for the mother to confirm the identity of her infant.

Discharge of mother and infant: (1) At the time of discharge, all identifications are checked with the crib card and the infant's birth record in the nursery by the supervising or graduate nurse in charge. (2) The infant is taken to the mother or to the person taking custody of it. With the assistance of the nurse, the mother checks the infant's identifications, removes one of the infant's identifications, and records her signature acknowledging her acceptance of her infant. This signature is witnessed by the graduate nurse in charge who checks the identifications. The item of identification removed is attached to the infant's birth record. (3) The infant is dressed in the presence of the mother or the person taking custody and is discharged without removing the remaining item of identification.

Committee members

Members of the special Committee on the Identification of the Newborn, who drew up these principles and recommended procedures, were: Chairman, Robert F. Brown, M.D., St. Luke's Hospital, Chicago; William Harcourt Brown, M.D., Augustana Hospital, Chicago; H. C. Hesseltine, M.D., Chicago Lying-In Hospital, University of Chicago Clinics; Myrtle E. Lewis, R.N., Cook County School of Nursing, Chicago; Mildred Lorentz, R.N., Michael Reese School of Nursing, Chicago; and Richard D. Vanderwarker, Passavant Hospital, Chicago.

• RAY E. BROWN
• FRED M. WALKER
• SISTER MARY ANTONELLA, S.C.N.
• D. R. EASTON, M.D.
• OTIS L. ANDERSON, M.D.
• F. STANLEY HOWE
• LAWRENCE J. BRADLEY
• C. C. HILLMAN
• R. Z. THOMAS JR.
• MORRIS H. KREEGER, M.D.
• M. H. EICHENLAUB

In this symposium, presented originally at the American Hospital Association's Cleveland convention last autumn, 11 authorities discuss briefly . . .

The technical aspects of a hospital's departments

IT IS GENERALLY agreed that the basic functions of management are those of planning, organizing and directing. What degree of technical knowledge is required of the hospital administrator in order to satisfactorily perform these three management functions?

If an enterprise consisted of a single activity in which everyone did the same thing the technical knowledge needed to perform the functions of management would be limited. Under such circumstances management could be expected to know all of the technology employed in the enterprise. The modern hospital is perhaps the most complex of enterprises. The majority of all the fundamental sciences are indirectly involved in its operation.

The average general hospital employs some 52 separate professions and trades in its routine work, not including the medical profession, which has found it necessary to break the practice of medicine into 14 distinct specialties. No less than 14 definable areas of activity, each functioning to produce a separate component of patient care, are departmentalized in the smallest hospital. This number reaches 31 in a large teaching hospital. To this complexity there is added the further complication of continuous 24-hours-a-day individualized service to sick persons. This factor multiplies the consequences of error and magnifies the responsibilities of the hospital administrator.

It is in this environment of congregated dissimilar technologies that the hospital administrator works. It is his duty to plan, direct, and judge the activity of highly trained and specialized personnel. Because of the long period of intensive training required, no one individual can fully master more than a few of the manifold technologies in daily use in the hospital.

Through the technique of organization, the chief administrator may delegate various aspects of the managerial task to those with specialized training in certain of the technologies. Such delegation does not, however, alter his ultimate responsibility, nor does it eliminate his need for technical knowledge.

It is essential that the administrator know enough about the technical aspects of each department's work to enable him to plan, organize and direct the efforts of the hospital. The extent of this required technical knowledge varies between departments, depending upon the nature of the department's work, the availability of competently trained individuals to head particular departments and the existence of established standards for judging the caliber and cost of work performed within a department.

The papers that follow are by persons who have studied certain specific departments. They will discuss the technical aspects the administrator needs to know about each.—RAY E. BROWN, *superintendent, University of Chicago Clinics.*

Accounting

THE HOSPITAL administrator should have a clear conception of the purpose and province of an accounting department. This implies that he should have an unconfused picture of the lines of relationship connecting the accounting department with all phases of his hospital's external and internal affairs.

He should have a detailed acquaintance with the financial records required by governmental agencies, by standardizing organizations, by his board of trustees, and by the hospital's auditors. He should be able to plan and outline specifically the records that have practical serviceability in the management of his hospital. Having designated the kinds of records that are required, the administrator needs a working knowledge of the soundest accounting practices that may be used in creating them. With that foundation, he should be able to approve with confidence the organizational framework and the regular work programs of the accounting department. He should be able to judge intelligently the qualifications of the workers, and to appraise fairly the character of their services.

He should know his community's social and economic conditions, and he needs a broad understanding of the psychological and technical aspects of credit and collection work.

The administrator should be sensitive to his hospital's responsibility to make intelligible reportings to its constituency, and he should realize the public rela-

tions advantages that may be gained by skillful presentation of financial information.

He should be familiar with standard accounting procedures used generally in the hospital field. He should know the best methods of inventory management and control.

From these premises, the administrator should be able to supervise the basic planning of budgets that may be submitted to governing authorities with convincing reasonableness. He should be able to analyze and interpret periodic reports from the accounting department in terms of their conformity to budgetary appropriations and in comparison with past experience. In other words, he should know the sound objectives of an accounting department, and he should have such a technical knowledge of fundamental principles and systematic procedures that he may have, and give, assurance that his accounting organization is functioning with proper efficiency.—FRED M. WALKER, *assistant secretary-treasurer, Fulton-DeKalb Hospital Authority, Atlanta.*

Purchasing

FIVE SALIENT FEATURES of the purchasing department should engage the constant concern of the hospital administrator:

1. He should know his purchasing agent as a purchasing agent, not merely as a key person by name. Through his purchasing agent the administrator should know the other personnel in the department—their jobs, their responsibilities and their accomplishments.

2. The administrator should understand how the accounting system of the purchasing department, together with the perpetual inventory accounting, ties in with the accounting system of the general bookkeeping under the comptroller.

3. The policies of the department should be as an open book to the administrator. These policies should be carefully formulated and should include public relations with the personnel of the hospital, with salesmen, with truckmen and with all persons with whom the purchasing agent and his assistants come in contact.

4. A monthly report should be presented to the administrator by the purchasing agent bearing the following information: (A) Monetary value of supplies purchased and dispensed within the respective month; (B) the sub-totals of the inventory value of supplies in stock as represented by these four divisions — administrative, nutrition, housekeeping, and medical and surgical supplies. (C) the sum total of the value of the supplies in stock as submitted by the bookkeeper of the perpetual inventory and the sum total as kept by the comptroller. If these two accounts differ greatly or beyond what the certified public accountant permits, the administrator should realize that the accounting system in the purchasing department needs to be scrutinized or the comptroller's account needs investigation.

Finally an administrator should know the value of a centralized purchasing system that controls the buying and the dispensing of all hospital supplies. Indirectly the administrator must control the purchasing department, so that through its efficient function he can enhance the function of all the departments in the hospital. — SISTER MARY ANTONELLA, *Administrator, Georgetown University Hospital, Washington, D. C.*

Engineering

THE ADMINISTRATOR does not need a detailed knowledge about engineering problems, but he should have sufficient knowledge to be able to discuss problems intelligently to the governing board when the question of an expenditure of money arises.

First, what should the administrator know about the boiler room? What type of boilers are most suitable for hospital service and how much reserve boiler capacity should be installed? The type of boilers must be determined by the kind of fuel available at the location—coal, oil or gas. It is also determined by the steam pressure to be carried and to a lesser degree by the chemical composition of the boiler feed water. One-third of the maximum boiler load should be installed for reserve capacity.

The type of fire equipment for the boilers depends on the kind of fuel used and the type of boilers used. Boilers set up for burning coal cannot burn gas or oil efficiently. Modern meters will give an accurate record of the efficiency of combustion.

In order to operate a boiler plant efficiently, an adequate supply of water is essential. This is obtained by having mains of sufficient size leading to the hospital with proper valve control.

Domestic hot water and water for the laundry must be treated. The first treatment that the water receives is softening. Softening can produce a chemically unstable soft water which, when heated, causes destruction of hot water tanks by corrosion and pitting. The prevention of this corrosion requires counteracting chemical treatment, and this process should be delegated to specialists. The largest supply of hot water is used by the laundry, and it is important that the laundry's water be soft.

Information on equipment for the laundry can be obtained from any of the large supply houses which have competent personnel to review the laundry with the administrator and give him good advice. All mechanical problems that arise in the laundry will have to be handled by the chief engineer. It is obvious, therefore, that in the purchase of equipment the engineer should be consulted.

In installing new elevators the administrator should obtain expert advice. Elevators should start and stop smoothly and have a smooth speed in movement. In order to accomplish this, manually-operated elevators should be of the traction type, having at least two-speed acceleration, with automatic or micro-leveling at the floors. Another important point is that patients have to be transported on the elevators in beds. Often fracture equipment is also attached to the bed and has to remain on the bed while the patient is moved in the elevator. It is wise, therefore, especially on the slower-speed service, to have the elevator sufficiently large to hold the longest

beds plus this fracture equipment. An eight-foot elevator is the minimum length that will accomplish this.

The halls and rooms are expected to be properly heated. The heating of hospitals is a highly technical problem, and here again expert advice should be obtained in the installation or change of any heating system. The zoned and differential high vacuum systems are superior to the old two-pipe vacuum systems by reason of their greater flexibility and economy.

Air conditioning has become so popular in business establishments, theaters and restaurants that both patients and doctors are beginning to demand air conditioning in hospitals. The difficulty here is that no air can be recirculated because of the danger of cross infection. All air must come from the outside, be conditioned and then passed to the rooms concerned. This produces an additional engineering problem. Air conditioning is expensive, and expert personnel are required to operate it.

Refrigeration is another factor of importance to the administrator. Ammonia refrigeration is now completely outmoded in hospitals. It involves too much risk in escaping ammonia in the case of leaks and accidents. More modern nonharmful refrigerants now are available for hospitals.

The most important point about autoclaves is that they be lined with a stainless nickel-steel alloy. This lining produces a hard surface, which is absolutely corrosion-proof and will not pit. Autoclaves lined with this substance have a higher initial cost but are more economical in the long run as they last practically indefinitely.

When should a hospital install its own electric power generating system? In the colder regions, where the heating load is carried for six months of the year or where the heating and power loads are balanced, it pays for the hospital to install its own electric power system. In addition to the saving, during the off heating season, the generating plant will act as an emergency stand-by. This is a very important feature in case of an interruption in the outside power supply. When a hospital does not have its own power generating system, auxiliary stand-by lighting systems are essential for the operating rooms and delivery rooms. This emergency lighting system can be produced by the installation of automatic battery sets. The stand-by battery sets can be so installed that the surgeon in the operating room or the obstetrician in the delivery room will not even notice the change in the lighting when the outside power shuts off.

The administrator should assume a humble attitude in the matter of technical problems. He should make full use of the knowledge that his own engineering department has and feel free to call in a consultant when indicated. Hospital engineering problems have become so complex and there have been so many recent advances that, unless the hospital administrator happens to be an engineer himself, it is almost impossible for him to keep up to date. A mistake on the part of the administrator can cost the hospital a considerable sum of money and may jeopardize the welfare of his patients.—D. R. EASTON, M.D., *superintendent, Royal Alexandra Hospital, Edmonton, Alta.*

Pathology

A HOSPITAL'S physical plant may be of modern design, its equipment superb and its clinicians the best in the community, but if the grade of clinical pathology is inferior, a satisfactory level of medical care will not be attained. If a few blood cells in the urine are overlooked, a diagnosis of cancer of bladder or kidney may be delayed and the patient's chance for cure thereby lost. Careless blood matching may bring death to the patient whose lung tumor has been successfully removed by a skillful surgeon. Improperly prepared slides or incorrect interpretation may permit an early cancer of the cervix to become hopeless before it is diagnosed. Conversely, many of the brilliant diagnoses and successful therapeutic results which enhance the reputation of the hospital, are based on data furnished by the clinical pathologist. An unsuspected diagnosis of malaria may be made on the new admission with high fever because parasites are discovered in the course of a routine blood count. A carefully performed autopsy may reveal that the post-operative gastrectomy death was caused by coronary thrombosis and not poor surgical technique.

If the administrator is a physician, he should have had in his medical training a rotating assignment through the various sections of a clinical laboratory and therefore should have a fair concept of the problems of laboratory medicine. If he is not medically trained his administrative training should include a period in the various sections of an active clinical pathology laboratory. By such experience he will learn to recognize many of the units that go into the organization of a smoothly operating laboratory service.

He will realize that a competent technician can do justice to approximately three complete blood counts per hour. He will know that modern hospital chemistry requires adequate space and expensive instruments such as photoelectric colorimeters and spectrophotometers.

He will realize that autopsies are costly because it takes about one full day of a pathologist's time to do all of the work for one complete autopsy. This day's work includes a careful dissection, a detailed gross report, critical selection of blocks for microscopic study, the examination of 20 to 30 microscopic slides, a detailed histologic report, and finally complete review of the clinical history and autopsy data to arrive at the diagnoses that form the final permanent record of the deceased patient. He will be aware that a skillful histologic technician spends at least a half day preparing the slides for one autopsy case and that a morgue attendant uses a half day preparing the morgue, assisting with a necropsy and making the final cleaning after the examination.

The administrator who has gained a first hand knowledge of clinical pathology procedures will realize that modern clinical pathology is costly. However, money wisely invested in more adequate

space, better equipment, and highly trained personnel will pay dividends in more accurate diagnoses and improved medical and surgical care for the patients.—OTIS L. ANDERSON, M.D., *assistant surgeon general, Public Health Service, Washington, D. C.*

Nursing

NO NURSING DEPARTMENT will succeed without, first, an adequate organization to cover all phases of a complicated job; second, competent supervision to insure the proper functioning of each unit in the organization; third, sufficient personnel to discharge, without loss of efficiency, all its many duties, with a margin for unpredictable fluctuations in load.

The greatest assets of any administrator are an insight into human character, which will insure the selection of competent leadership, and the ability to present clear and convincing recommendations to the governing board.

The administrator should have the ability to detect over-emphasis and to maintain a balance between an ideal maximum and a practical and attainable level of performance, as well as preserving a reasonable equilibrium between the occasionally conflicting demands of various departments of the hospital. He should have a clear understanding of the great importance of many factors which contribute to the comfort and safety of the sick, including such items as linen supply, mechanical equipment, labor-saving devices, good housekeeping and maintenance of rooms and corridors.

He should be aware of the need for personnel to assume non-nursing duties and he should be competent to help determine the degree to which such subsidiary workers can supplement the limited supply of graduate nurses. He should be able to demonstrate to his trustees the causes for continually mounting costs, such as the necessity for maintaining reasonable standards of care, and the constantly increasing variety of new services and functions that are being placed upon the nursing staff. In other words, he must interpret the results of his nursing department as they appear in the financial statement and relate the cost both to the quality and quantity of the service and to the income produced.

He should realize clearly that care of the sick never can be rendered by production line methods, since no two patients are alike, and he should not depend upon slide rule calculations for determining the number of hours of care required by a given group of patients. He must appreciate that a stationary census can conceal a heavy turnover, involving burdens on the nursing staff not expressable statistically. He must realize also that nurses inherit many duties not their own when other departments are closed at night and on weekends, thereby saving the hospital the very substantial cost involved in "around the clock" coverage of such services as admitting, pharmacy, and record room.

The administrator must keep abreast of new methods and techniques in order to support the recommendations of his nursing director where new facilities and special personnel are required, and he must be able to evaluate the many intangible demands upon a nursing staff that cannot be shown adequately in cold service statistics.

In hospitals maintaining nursing schools, he must have a sympathetic understanding of the educational principles involved that entail an entirely different point of view if a good school is to be maintained and justice done to the students enrolled. He should keep abreast of the newer trends in nursing and of the preparation the nurse will require to meet new demands upon her skill.

He should have the ability to enlist the services of volunteers and to fit them into the nursing organization so that they will be of benefit, with no interference or friction with the work of the professionals.

In brief, while strictly an amateur in this highly technical art, he should somehow be able to know the correct answers to all problems brought to him by his professional associates in the nursing field.—F. STANLEY HOWE, *director, Orange (N. J.) Memorial Hospital.*

Radiology

SINCE THE INTRODUCTION and use of radioactive materials, the radiology department has become more complex and technical. Because of this complexity, the administrator must delegate many aspects of the managerial task to one specially trained—the radiologist. Delegation of responsibility, however, does not alter the administrator's ultimate responsibility, nor does it eliminate the need for some technical knowledge. In at least two areas, the administrator should have a working knowledge of the technical factors involved. Especially should he be concerned with the efficiency and convenience of the department and with the safety of the patients and personnel.

Few administrators have an opportunity to plan an x-ray department in a new building, but many have had to relocate, redesign or find additional space for existing departments because of changes in technique, equipment or demand. To plan an efficient department the administrator must have a good knowledge of such things as requirements for power and water, the potential patient load, the type of work to be done and the capacity of the equipment to care for the load. He should know space requirements for equipment, offices, and working areas. The distribution among house, outpatient clinic and private ambulatory patients is another important factor.

In any major structural change planned, possible demands occasioned by the use of radioactive materials should be anticipated.

Another major area of responsibility and concern is the protection of patients and personnel from electric shock, radiation, fire and explosion hazards. Accidental exposures to physicians and technicians are primarily the result of carelessness. Accidents to patients may come from omission of the proper filter, incorrect distance, excessive exposures, or by an outright defect in the electrical

equipment. The principal concern is that arising from small exposures which occur daily and affect hospital personnel.

The radiologist who has had specialized training is usually competent to advise the administrator on technical problems. The administrator must convince himself that the radiologist possesses the necessary professional qualifications. He also should be satisfied with the training and competence of the technicians employed. In some areas the architect can be helpful. Manufacturers of x-ray equipment are prepared to offer expert assistance. In any x-ray installation or after any major change in existing facilities, a survey and inspection should be made by a qualified expert.

Articles published on x-ray protection and standards provide additional information. At least two handbooks should be found in every hospital—the National Electrical Code, covering electrical wiring and apparatus, and the unified safety recommendations of the Advisory Committee on X-ray and Radium Protection. The advisory committee's report is a publication of the National Bureau of Standards, and the National Electrical Code is published by the National Board of Fire Underwriters.

Management support is the prerequisite for success in any safety program in which radiation safety is one component. The cooperation of every employee in protecting himself and his colleagues is required. Enforcement of safety standards is the administrator's responsibility.—LAWRENCE J. BRADLEY, *director, Genesee Hospital, Rochester, N. Y.*

Pharmacy

IN ACCOMPLISHING its goal of service to the patient, the hospital pharmacy has close interrelationships with other departments of the hospital, the professional staff, the general public, the pharmaceutical trade and state and federal governmental agencies. The hospital administrator must have a sufficiently broad technical knowledge of pharmacy operation to enable him to understand the implications of all of these interrelationships and to insure that all of the hospital's responsibilities along these lines are fully met.

Aside from the accounting and purchasing departments, the pharmacy enjoys greater autonomy in its business operations than other departments of the hospital. This is necessarily so because of the kaleidoscopic developments in manufacturing methods, marketing, cost, storage, dispensing and use of pharmaceutical products.

The ever-changing characteristics of everything pharmaceutical reflect themselves in the purchasing practices, inventory policies, drug charges and finally in the hospital budget, and are matters, therefore, with which the administrator must keep abreast. The administrator must appreciate the economy of inventory control and rapid turnover of drug stocks, the value of a hospital formulary in minimizing duplication of therapeutically similar items, the potentialities for savings through the manufacturing department, and the necessity for accurate price control and drug billings to insure that the balance between income and expense is in accord with the fiscal policy of the hospital's governing body.

The administrator must assist in formulating and finally must approve and carry out a policy of charging for drugs consistent with the best interests of the institution.

He is responsible for the employment of conscientious, accurate and alert pharmacists, who must have had approved undergraduate training.

Because of the habit-forming characteristics of many drugs and the danger of self administration of others, federal and state laws have been enacted to govern their manufacture, sale and use. Others upon which federal taxes may be remitted to nonprofit institutions are purchased, stored and employed only under strict governmental regulation. Narcotics records must be kept and prescriptions must be filed for specified periods of time. On all of these technical matters the administrator must keep fully informed.

Service to the patient requires that there be readily available at all times the pharmaceuticals required by members of the medical staff in the modern therapeutic management of their patients. This service must extend around the clock and must provide for reserve stocks of emergency drugs in readily accessible locations at such times as the pharmacy does not remain open. It must insure appropriate labeling and storage on nursing units and in dispensaries to safeguard against careless or improper use and to conform to regulations governing the handling of poisons and narcotics.

The administrator must be on the alert against the abuse of drugs. Especially is this true in the management of ward patients where members of the resident staff may be inclined to prescribe in excessive amounts, to order drugs that may not be necessary or to employ costly drugs where inexpensive ones would serve equally well. This applies particularly to the prescribing of antibiotics.

An important responsibility of the pharmacy department is its participation in training activities. This may include the instruction of student and graduate nurses and physicians of the resident staff and conferences with groups of attending physicians interested in special phases of drug therapy. In the larger institutions it will provide graduate training for pharmacy interns and may include research activities.

While the administrator may lean heavily on his chief pharmacist for technical advice, the safety of the patient and the efficiency of the institution are ultimately his responsibilities. Only with a broad technical knowledge of all phases of hospital pharmacy operation will he be able to meet them satisfactorily.—C. C. HILLMAN, M.D., *director, Jackson Memorial Hospital, Miami.*

Dietary

THE ADMINISTRATOR should have sufficient knowledge of the technical functions of the dietary department to ascertain whether it is being operated at the most economic level to assure adequate patient and employee dietary serv-

ice. Here are some of the factors that provide such knowledge:

1. A thorough understanding of kitchen equipment.

2. An ability to arrange equipment so as to gain unhampered flow of activities.

3. An ability to survey, comprehend and determine the most feasible method of food distribution—whether centralized or decentralized—and to fit such a system into his physical plant.

4. A general knowledge as to current market prices of foodstuffs.

5. An ability to select a competent dietary staff and a determination to delegate responsibility and authority to the department chief, eliminating the need for interference by the administrator except in instances of obvious violations of policy or good judgment.

6. A general acquaintance with modern food therapy trends, realizing that approximately 26 per cent of patient trays are special diets requiring costly individual preparation.

7. An understanding of health and sanitation regulations and an ability to enforce their compliance by the dietary department.

8. An ability to establish such dietary records as will provide an immediate detection of weaknesses or unusual expense.—R. Z. THOMAS JR., *administrator, Charlotte (N. C.) Memorial Hospital.*

Laundry

THE QUESTIONS with which the administrator is primarily concerned in the functioning of his laundry are: (1) Is the linen service adequate and efficient? (2) What is its cost? (3) Can this cost be reduced without impairing quantity or quality?

Any technical aspects in laundry operation that affect these questions are the proper concern of the administrator.

To analyze the adequacy and efficiency of his laundry operation, the administrator must know the average total poundage of linen handled per day. If the laundry operates without the use of a scale to determine this basic unit, he may be working "in the dark."

The total poundage then should be converted to pounds per patient day. In general hospitals this has been found to average between 12 and 15 pounds. While there may be many modifying factors, an administrator whose linen usage is much lower than 12 pounds per patient day should investigate whether he is giving adequate service. If higher than 15 pounds, the reason should be determined.

In considering total poundage, it is often helpful to break the figure down into percentages by major types of work: Flatwork, which should run between 60 and 70 per cent of the total; rough dry, 20 to 30 per cent; and presswork, 5 to 10 per cent.

Several factors that can modify the percentage breakdown as to type of work handled and that can modify total linen usage without being reflected in patient-day statistics include: The number of operations and deliveries, the number of interns and residents, the school of nursing, the outpatient department, activity in the accident room, the research laboratories, and diagnostic and therapeutic facilities for private ambulatory patients.

Now what about cost? This consists of two parts: (1) Cost per pound of laundering, and (2) annual cost of linen replacement. Laundering costs must include indirect as well as direct expenses, and surveys show them to average about three to four cents a pound, or between 35 and 50 cents per patient day. Linen replacement costs average between six and 10 cents per patient day.

If costs are excessive or if the quality of service is poor, the administrator, with the help of his laundry manager, should be able to determine the cause. In his investigation, he should be cognizant of the following factors:

1. Machinery and equipment may be old and nonproductive. Purchase of new equipment, which can amortize itself in six to eight years by increasing production, eliminating costly repairs, eliminating hand labor, or reducing wear and tear on linens, is more than justified.

2. Equipment may not be used to best capacity. For example, a laundry should get an average of six loads out of a washing machine in an eight-hour day. Water lines should be of sufficient capacity to fill two or three machines in not more than one to one-and-one-half minutes. Since there are 10 to 12 water changes per wash load, inadequate water-supply lines can materially reduce machine output. The temperature of the hot water should be 180°F. to insure good quality of washing.

Another bottleneck is encountered if extractors are not geared to the capacity of the washing machines. In addition, the administrator should know the working efficiency of the extractors, which should remove at least 50 per cent of the water. If they are removing less than this, the flatwork ironers are serving as water extractors. This is expensive, as it increases steam usage, slows down the ironers and discolors the linen. Extractor efficiency can be determined by spot checking the dry weight of a given load before washing, the wet weight before going into the extractor, and the damp weight after coming out of the extractor.

The speed of flatwork ironers should be checked too. They should run at an average of 80 feet per minute, and if necessary up to 110 feet per minute. A flatwork ironer should do two-and-one-half to three times the amount of work turned out by one washing machine.

Even with excellent equipment, an improper layout of the laundry may cause an uneven flow of production and traffic, with resulting inefficient use of equipment and personnel.

3. Use of supplies may be excessive. Unless the water in his city is exceptionally soft, the administrator needs a water softening system in his laundry. Use of soft water will lead to whiter linens and will reduce the use of soap and alkali by more than half. With soap costing 11 cents a pound and alkali six cents a pound, these savings may amount to 10 to 15 cents per hundred pounds of linen, whereas the cost of softening the water needed to wash 100 pounds of linen is not more than two cents. Use of less soap and alkali also means longer lasting linens and less maintenance on washers.

Another important supply item is sour, used to remove soap. It is wasteful to use an excessive amount of sour, at 16 cents a pound, when additional water rinses will accomplish the same result. A certain amount of sour is necessary of course, but a happy medium must be struck between the use of sour and water rinses to remove soap.

A proper or improper washing formula will be reflected in the percentage loss of tensile strength of the linens, which should not be more than 5 per cent in 20 workings.

4. Control of linen distribution is an important factor affecting the efficiency of service. Care should be taken to integrate the linen inventory with the optimum speed for processing in the laundry. The control system should enable the administrator and the laundry manager to pin-point any department where excessive usage is taking place.

5. Personnel can scarcely be called a technical factor in laundry operation, but high labor turnover due to an inferior type of help or poor personnel practices may be especially costly in a laundry.

Finally, there is a need for occasional bacteriological surveys. A recent experiment at Michael Reese Hospital indicated that a slight variation in the washing formula may make the difference between contaminated and bacteriologically clean linens.—MORRIS H. KREEGER, M.D., *director, Michael Reese Hospital, Chicago.*

Housekeeping

IF EFFECTIVE performance is to be achieved and maintained by the housekeeping department, the department head is the one who must know and actually look after the details from day to day. If the hospital is small, however, and is without competent direction and supervision in its housekeeping department, the administrator must provide direction and control of housekeeping service.

Should the hospital be fortunate enough to have a specially trained and qualified executive housekeeper, then the administrator need concern himself only with upholding this person in the position she occupies and with maintaining a check on the accomplishments of her department.

This does not mean that the administrator can avoid responsibility in assisting the executive housekeeper to plan, organize and control the functions of her department, but it does mean that he should not attempt to tell the technically trained and qualified head of the housekeeping department how to perform her detailed duties.

If the administrator is not satisfied with the performance of the housekeeping department, he should sit down with the person in charge and analyze the situation and help apply the necessary remedies. This is the only way I know to encourage initiative and self-reliance upon the part of the housekeeper.

The detailed direction and control of the housekeeping department by its executive head should include the following:

1. The housekeeper needs to be a friendly person, interested in and enthusiastic about her department and its functions. She shall be responsible directly to the administrator who, in turn, must bear the final responsibility for the success or failure of this department.

2. The administrator must have confidence in the housekeeper's integrity, loyalty and ability to teach and to maintain hospital standards.

3. The housekeeper shall select, teach, direct and, as necessary, terminate the services of employees in her department. Where a personnel department exists, the housekeeper shall make full use of its skilled and varied services. The housekeeper shall know personally how to perform each housekeeping duty and, when necessary she shall assume such duty.

4. All cleaning, sanitation and housekeeping duties shall be under the housekeeper's direction and control. In many hospitals, the linens are her responsibility as well.

5. Housekeeping activities must dovetail with those of nursing, dietary, building maintenance, laundry, purchasing and all other departments.

6. The housekeeper must know and maintain qualities and standards of textiles, and the tools and materials necessary to the every day functions of her department. At the same time, she should aim at economy of operation, the long life of linens and drapes and the preservation of painted surfaces.

7. Sanitation of buildings and furnishings shall be the responsibility of the housekeeping department. Orderliness and eternal vigilance as to "the corners" and "out of the way places," such as elevator shafts and dumb waiter pits, are vital to good housekeeping and to fire prevention.

8. The promotion of safety measures is absolutely necessary. This includes reporting or removing all hazards created by water spilled on the floor, objects out of place, frayed electric cords and broken furniture. This the administrator must know and the housekeeper must practice every day.

9. Good lighting and ventilation are indispensable in maintaining freedom from odors and an accumulation of refuse.

10. Appropriate equipment and quality supplies must be furnished to the housekeeping department for the successful discharge of its duties. This includes a complete service for the extermination of all vermin. The "know-how" and the facilities necessary for its execution are required in housekeeping, as elsewhere in the hospital.

11. The capable housekeeper will watch the supply and storage closets and look out for petty larceny. Brushes, sponges, cloths, soap and detergents—all these and more can be used by anyone anywhere, and their loss is costly to the hospital.

12. Housekeepers need to be good executives, with a full knowledge of business methods and the purchasing power of the dollar.

13. The successful housekeeper will know how to treat employees humanely and fairly. She will know how to bear her share in meeting the hospital's responsibilities to both patient and employee. —M. H. EICHENLAUB, *superintendent, Western Pennsylvania Hospital, Pittsburgh.*

"The lower basement corridor leading to the prospective linen room had been a scramble of . . . things found in hospital basements."

Bud finds a place for the linen

HERBERT M. KRAUSS

THE TIME HAD COME to do something about linen control, for Bud had been managing the laundry for three months now and had learned the ropes. Our housekeeper was not only distributing linen, but she was also supervising the cleaning, doing the purchasing, and accomplishing a great deal of sewing and mending for our 105-bed hospital. I had been wanting to shift the responsibility for linen distribution when the time was right.

Bud had watched the perfectly clean sheets and pillow cases come down the laundry chutes unused, after having been "exposed" (in a dresser drawer) to departing patients. He had noticed the torn pieces rotating through the house and laundry without being replaced. He had seen the nurses walking down to the laundry, in the lower basement, several times every Monday in quest of more linen. And he had noticed how small our linen closets on the floors were.

Once we had thought of using the "strong room" in the upper basement as a linen depot, but after considering the problems that might arise upon discontinuing that temporary haven for occasional mental patients we let that sleeping dog lie.

A basic difficulty with keeping finished uniforms and linen in the laundry was that this department could not be closed off or locked—because leading from it into the alley was the fire exit for the north wing lower basement.

Then one Monday morning Bud came up to the office with The Idea: Why not use the room *next* to the laundry for a linen room?

"Well, now," I said, "I don't see how we can do that. After all, that room was set aside some time ago to store mattresses and beds, and it's choked full of them. That's what it was set up for . . . " But before I finished, the idea began to seem like a natural. It sounded so good, in fact, that I thought there must be something quite wrong with it.

After talking with the housekeeper about giving up linen distribution, and to Charles about finding his fracture beds in the basement corridor instead of that room, and to those other folks who might be affected, we went to work. In 15 or 20 easy steps we made a linen room out of a little-used, jam-packed storage place.

The lower basement corridor leading to the prospective linen room had been a scramble of open cupboards which held uniforms and dust, a large collection of solution jars in and out of cardboard cases, uniforms hanging on racks, drying mop heads, motors, laundry carts, desks, an old sterilizer, soap barrels, and other things found in hospital basements. By selling some "junk" stored in the garage, we created space into which to move things from the center lower basement. Then we started shifting things from one place to another until finally we got the beds out of the future linen room and lined them along the now-cleared lower basement corridor.

Mattresses were rebuilt and placed on a rack in the new linen room. The old cabinet for storing uniforms was sawed in half, installed in the room, painted, and each cubby hole was given a name. More shelves were constructed, the ceiling and walls were painted white and the floor was painted gray.

Bud and the carpenter made a Dutch half door out of the old solid one so that business could be done over the counter when nurses called for their uniforms. They sanded and painted an old table to provide a place to sort linen. Then a fluorescent light fixture was taken out of a patient's room and adjusted to adorn the linen room ceiling. Finally came a portable uniform rack on which to hang uniforms alphabetically, and the telephone was moved from the noisy laundry into

Mr. Krauss is administrator of the Burlington (Iowa) Protestant Hospital.

the new linen room 20 feet away. A lock was placed on the door and the second key was given to the nursing supervisor on duty.

Now we were ready to start functioning. The plan was to deliver linen each morning at 7 o'clock instead of in the late afternoon. The amount delivered was going to be based on the estimated demand determined the previous afternoon by each nursing station. And we were going to prepare "linen packs" for the nurses.

For patients already in the house, the pack was to contain a large sheet, a draw sheet, a pillow case, a gown, a bath towel, a hand towel, a face cloth and a dresser cover.

The "clean unit" pack for incoming patients was to contain a bed spread, bath blanket and bed pan cover in addition to the items in the other pack. These packs were to be prepared during the afternoon preceding the day on which they would be delivered.

We called a meeting of the nursing supervisors before we started the new regime so that they would be familiar with the plan and have an opportunity to ask questions.

We now operate the linen room from 7 A.M. to 4 P.M. seven days a week. The first delivery of packs is at 7 A.M., and at about 11 o'clock in the morning the "extra linen" is taken to the floors. At about 3 o'clock in the afternoon the requisitions for the next day's packs are collected. Emergency items are delivered throughout the day when they are requested by telephone.

After more than a month of ironing the kinks out of the system, and after the discovery of those unacquainted with linen distribution that the demands of a small bed area may far exceed those of a nursing station double in size, the time had arrived to make adjustments in the procedure. Our pack system was working fine, but we had to change the method of delivering additional items or "extra linen" on a requisition basis.

Another new idea filtered through from a visiting hospital administrator: Why not determine a quota of extra linen for each nursing station, to be delivered each day to supplement the packs?

After discussing it with Bud, we held another meeting with the nurses. They appreciated the pack system, were pleased with the handling of their uniforms and were anxious to cooperate. The next day they handed in their estimated daily quotas of extra linen—a few draw sheets, pillow cases, binders and similar items for each station. Of course, some estimated quotas were too high. We didn't have that much linen. But I feel that this will "shake down" as we move along into a practical working arrangement.

The new system requires more linen in circulation than we previously had on hand, for now there is always some on the beds, some in the laundry and some made up into packs waiting on the linen room shelf for distribution the next day. We will be a little short on certain items until new purchases arrive.

Our objectives in developing the new linen room were fivefold: (1) To eliminate trips by nurses to the lower basement for more linen; (2) to save nurses' time by preparing neatly-wrapped packs containing all the daily linen needs for old or new patients; (3) to keep uniforms from falling into the hands of someone besides their respective owners, as occasionally happened when they were left in the cupboard; (4) to provide a secure place for the storage of clean linen; and (5) to achieve greater control over linen distribution.

Now I feel that, because of the willingness of the nurses and the laundry workers to try out a new system, we have advanced into the realm of linen control. Also, the stored beds now are more readily accessible, and the solutions are a floor higher in a better lighted place. And all of these changes were wrought because Bud found the room next to the laundry, which, of course, was for storing beds.

ONE FOR THE RECORD

A glossary of federalese

A FEDERAL OFFICIAL recently had his staff under fire for weeks to write an article for a professional journal ["The National Clinical Center for Chronic Disease Research," HOSPITALS for November] under his name. His people thought their job was well done. But the official went over it to write in all the government words and phrases they had tried hard to avoid. After the article appeared, the official received an anonymous glossary of government words and terms in the mail. Some of them follow:

A program—Any assignment that can't be completed by one phone call.

Channels—The trail left by an interoffice memo.

To expedite—To confound confusion with commotion.

Expediter—One who does same while riding fast trains and staying at good hotels.

Efficiency expert—A guy who trains expediters.

Coordinator—A guy who has a desk between two expediters.

To activate—To make carbons and add names to the memorandum.

Under consideration—Never heard of it.

Under active consideration—We're looking in the files for it.

To spell out—To break big hunks of gobbledygook down into little hunks of gobbledygook.

Further substantiating data necessary—We've lost your stuff. Send it again.

Point up the issue—Expand one page to 15 pages.

Research—Copying from one book is plagiarism; copying from two books is research.

A conference—A group of people who individually can do nothing but who can meet collectively and agree that nothing can be done.

Liaison officer—A person who talks well and listens better but has no authority to make a definite statement.

Referred to a higher authority—Pigeonholed in a more sumptuous office.—JACK MASUR, M.D., *director, Clinical Center, National Institutes of Health, Public Health Service, Bethesda, Md. (Prepared for the Hospital Administrators Correspondence Club.* Also published in the Washington *Post.)*

Educating the visitors of tuberculosis patients

A well-planned cooperative program brought gratifying success at the Triboro Hospital.

LILLIAN F. HUTCHINSON

THE STRIKING SUCCESS of a visitor education program conducted last spring at Triboro Hospital, Jamaica, N. Y., illustrates vividly that there is great need for education of friends and relatives of tuberculous individuals. The program was so successful that another is planned for this year.

The program, planned jointly by the hospital and the Queensboro Tuberculosis and Health Association, involved one afternoon session each Sunday for eight consecutive weeks. At each session professional speakers discussed various approaches to tuberculosis therapy that might be followed by families of patients.

A gratifying total of 700 persons attended during the entire period and at each session there was an average of 85 persons. All visitors said they found the program interesting and valuable and many requested additional sessions on other topics.

PLANNING

Planning for this project originally was proposed at a meeting of the hospital medical superintendent and a tuberculosis association representative in February 1946. The medical superintendent knew that our association was keenly interested in helping to provide educational services and suggested that projects be planned cooperatively for four major groups: (1) Nurses and nursing attendants, (2) hospital auxiliary staffs, (3) tuberculosis patients, and (4) families of the tuberculous.

During the next six months a study was made by the tuberculosis association to determine if the needs for educational services at Triboro Hospital were similar to those in other tuberculosis institutions. Also, we sought to learn what projects had been undertaken to meet existing needs. Letters of inquiry were sent to tuberculosis sanatoria and associations throughout the country.

AWARE OF NEEDS

The answers revealed that hospital administrators are keenly aware of the need for increased tuberculosis education for all four groups, but showed that difficulties in meeting these needs are manifold.

Queries sent to medical and health libraries uncovered no written reports on educational programs for nurse attendants, hospital auxiliary staffs, patients or their families. It was apparent that educational services must begin first with those groups most immediately concerned with tuberculosis as an occupational hazard. Therefore, cooperative projects were planned first for each of these four groups.

The local tuberculosis association did not take over the responsibility of directing any of these projects. It was not our intention to do so. However, we assisted with the planning of the projects and presentation of programs whenever the hospital staff requested us to do so.

Approval to proceed with plans for the last project, visitor or family education, was secured from the tuberculosis association director and the medical superintendent. A preliminary outline then was prepared by the health education department.

FIVE OBJECTIVES

The objectives of the program were:

1. To describe the importance of relatives in aiding recovery.
2. To acquaint visitors with facts about tuberculosis from the medical, the family and the community point of view.
3. To describe hospital department services.
4. To enlist the cooperation of visitors in maintaining hospital regulations.
5. To stimulate the visitors' interest in helping the patients in recovery and rehabilitation.

The organization for program planning was as follows:

A six person steering committee was established. The members of this committee were: The tuberculosis association administrator, his administrative assistant, the association health educator, the medical superintendent of the hospital, the superintendent of nurses and the hospital's director of rehabilitation.

This committee reviewed the areas of greatest need for family education and suggested methods for cooperative planning. A second and more detailed program outline was then prepared which incorporated their recommendations.

OFFICIAL APPROVAL

This was sent to the medical superintendent, the medical board, the rehabilitation board and finally to the commissioner of hospitals, who gave it official approval.

The organization, revision and final approval for the visitor education project required two and one-half years.

A visitor program planning committee then was established. Appointed to this committee were the six members of the original steering committee plus a social service director, the occupational

Miss Hutchinson is health education director of the Queensboro Tuberculosis and Health Association, Jamaica, N. Y. Adapted from a paper presented at the Metropolitan Sanatorium Conference, New York City, June 1949.

therapy director, the chief dietitian, the housekeeper and a patient representative.

With the exception of the housekeeper and the patient representative all members were to participate in program presentation. The housekeeper arranged for the accommodation of visitors at each session. The patient representative informed patients of the project and enlisted their help.

This planning committee made final decisions regarding the subjects to be presented, dates and hours of presentation, and types of motion pictures and printed materials to be used in each session. Subjects to be presented were selected on the basis of expressed visitor interest and from topics suggested in a staff review of patient and visitor problems.

In order to estimate visitor interest in educational programs, a pilot project was conducted at the hospital in the fall of 1948. Four talks were given, covering these subjects: "Medical Aspects of Tuberculosis," "Nutrition," "Occupational Therapy" and "Rehabilitation." Visitor interest in the project was excellent.

The planning committee then proceeded with arrangements for a more comprehensive program, covering eight major subjects. These were: "Medical Treatment," "Mental Health," "Preventing the Spread of Tuberculosis," "Help with Family Problems," "Rehabilitation," "Nutrition," "Handicrafts" and "Health after Recovery."

EIGHT MAJOR SUBJECTS

All program promotion and publicity was provided by the tuberculosis association and cleared for release through the hospital medical superintendent. Costs for printed tuberculosis education material amounted to approximately $425, provided by the association. Other materials used, such as literature on nutrition and films, were supplied by the association or obtained free from outside sources.

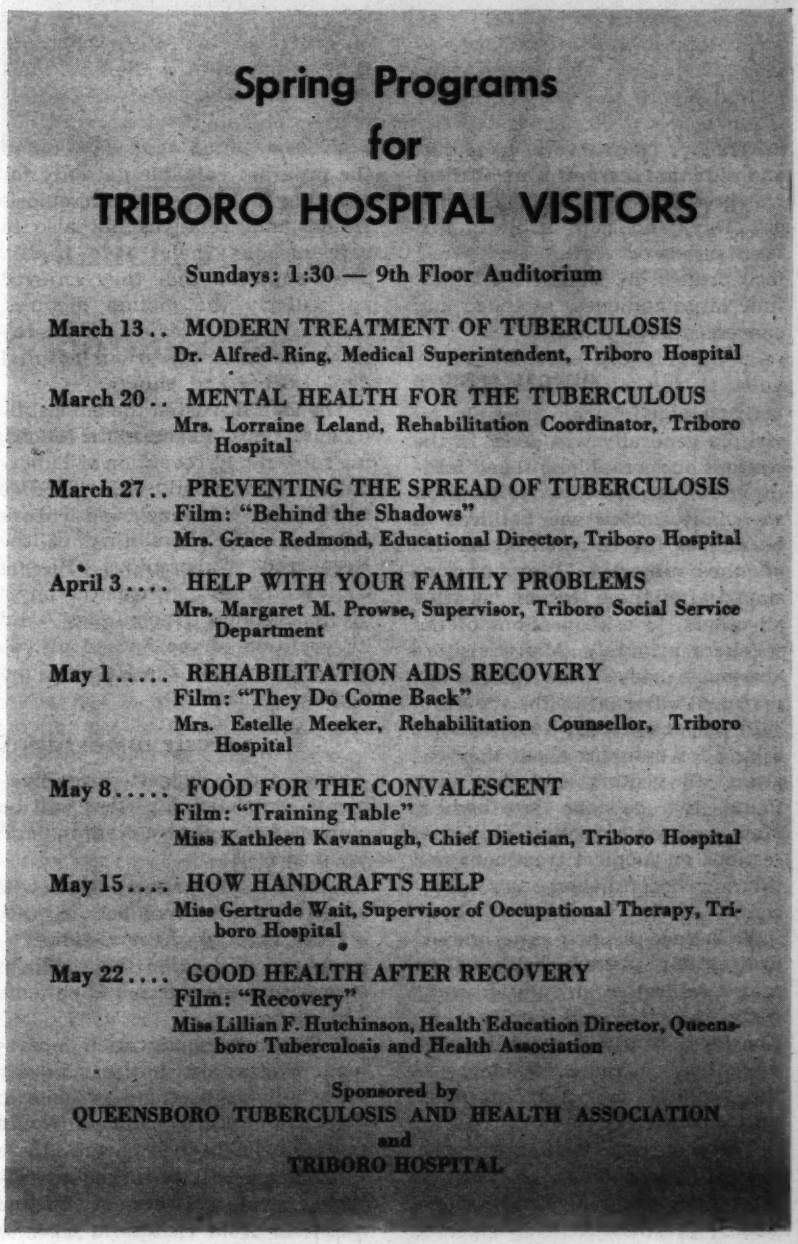
An attractive printed program notice was made, and in listing titles of the talks, scientific terminology was carefully avoided. Lay terms were used wherever possible in all other promotional material.

One thousand program announcements were distributed to visitors in the hospital lobby by the women's auxiliary. A thousand more were distributed to patients to be presented to their friends. At the suggestion of the medical superintendent, program announcements were mailed to the families of all hospital patients.

HANDBILLS USED

It was realized that the pulling power of a program announcement distributed early in March would not continue throughout the eight sessions. Therefore, handbills for each session were mimeographed and distributed through hospital channels 10 days prior to each talk. Two large cartoon-type posters were made for each session and placed in the lobby. Identical smaller posters were placed in each of the hospital corridors. Personnel in every department helped to promote the program by word-of-mouth publicity. Seven newspaper releases appeared in Queens County and New York City dailies.

The eight programs, which were


Spring Programs
for
TRIBORO HOSPITAL VISITORS
Sundays: 1:30 — 9th Floor Auditorium
March 13.. MODERN TREATMENT OF TUBERCULOSIS
Dr. Alfred Ring, Medical Superintendent, Triboro Hospital
March 20.. MENTAL HEALTH FOR THE TUBERCULOUS
Mrs. Lorraine Leland, Rehabilitation Coordinator, Triboro Hospital
March 27.. PREVENTING THE SPREAD OF TUBERCULOSIS
Film: "Behind the Shadows"
Mrs. Grace Redmond, Educational Director, Triboro Hospital
April 3.... HELP WITH YOUR FAMILY PROBLEMS
Mrs. Margaret M. Prowse, Supervisor, Triboro Social Service Department
May 1..... REHABILITATION AIDS RECOVERY
Film: "They Do Come Back"
Mrs. Estelle Meeker, Rehabilitation Counsellor, Triboro Hospital
May 8..... FOOD FOR THE CONVALESCENT
Film: "Training Table"
Miss Kathleen Kavanaugh, Chief Dietician, Triboro Hospital
May 15.... HOW HANDCRAFTS HELP
Miss Gertrude Wait, Supervisor of Occupational Therapy, Triboro Hospital
May 22.... GOOD HEALTH AFTER RECOVERY
Film: "Recovery"
Miss Lillian F. Hutchinson, Health Education Director, Queensboro Tuberculosis and Health Association
Sponsored by
QUEENSBORO TUBERCULOSIS AND HEALTH ASSOCIATION
and
TRIBORO HOSPITAL

presented on Sundays one hour before visiting time, began in March and continued through May, with interruptions only for holidays. Professional personnel from the hospital and the tuberculosis association presented the talks. Association personnel introduced and coordinated every session.

What were the results of this organized planning and presentation?

Public response was expressed by an attendance that averaged 85 persons at each of the eight sessions. The highest attendance was 160 persons who heard the first talk of the series on medical treatment. Next highest attendance was the 120 person audience at the mental health session. The lowest attendance was 30, at each of two programs. These were handcraft and nutrition sessions. One of them was presented on a holiday, Mother's Day, and both subjects had been discussed earlier during our test project in October. At that time large audiences attended and expressed keen interest.

VISITORS APPROVE

Discussion in open meetings by visitors generally was good. In the sessions on mental health and family problems, however, discussion was limited. This was believed to be due to the confidential nature of the subjects. Many persons stayed after these sessions, as after all others, to ask questions of the speakers privately. Many visitors also made trips to the various department offices after the program.

In response to our questionnaire asking for opinions about the program, all visitors said that they found the sessions worthwhile. Many persons requested additional sessions on medical treatment and the new hospital-home care project.

We believe this first experimental project for visitors achieved its major objective by establishing better hospital and family relationships. It also helped to alleviate fear, increase confidence in the hospital and clear up much misinformation.

The idea of a visitor education project was sufficiently novel to attract the attention of professional weekly journals. Articles appeared in *Better Times*, the Welfare Council news weekly, and in *Channels*, produced by the National Publicity Council.

News of this program also resulted in many inquiries from schools of public health and other organizations. The tuberculosis association responded to 24 of these requests for information, and Triboro Hospital answered a number also.

An evaluation of this project was made on June 28, 1949, when the program committee met with 12 of the visitor participants. Their opinions about the program were sought and suggestions were requested regarding future programs. Each member of the planning committee also was asked to give his opinion and suggestions.

Visitors stated that they found the program valuable not only for assisting in care of tuberculosis friends and relatives but also in safeguarding their own health. They reported that they enjoyed particularly the motion pictures, lantern slides, review of x-ray films and tours of various hospital departments and clinics.

The staff discussed the advisability of sessions on some of the following subjects: "Prevention of Tuberculosis Among Children," "The Use of B.C.G.," "Marriage and Tuberculosis," "The Possibility of the Recovered Tuberculous Having Children Safely," "Chemotherapy," "New Surgical Techniques" and "Prevention of the Spread of Tuberculosis within the Hospital and within the Home."

POSSIBLE IMPROVEMENTS

In regard to suggested improvements, the following steps will be emphasized in future planning and organization:

1. Hospital department heads will orient their staff members regarding the purpose of the visitor program and will enlist their help in stimulating the interest of patients and visitors.

2. The nursing education department will conduct a direct inquiry with both visitors and patients to determine which subjects would particularly interest them.

3. Nurses will be urged to collect a wide variety of written questions from visitors to serve as guides for speakers in preparation of their talks.

4. The medical director will orient the medical staff about the visitor program and stimulate their interest in participating.

5. The patient representative will orient the ward delegates and request their aid in arousing visitor and patient interest.

Community agencies that assist in caring for the tuberculous will be invited to participate in future programs. It is probable that projects for family education will include representatives of these agencies and patients' families on the planning committee.

THREE SUGGESTIONS

In many parts of the nation today, plans for the development of hospitals as community health teaching centers still are in the blueprint stage. Hospital administrators who are interested in developing programs similar to that at Triboro Hospital may find the following suggestions helpful in preparing a tuberculosis education project:

1. Considerable time should be taken in establishing good relationships between the voluntary agency and the hospital. Hospital personnel should recognize that the agency is there to provide a needed service only until the hospital itself has enough adequately trained staff members to whom responsibility can be delegated.

2. To obtain the cooperation of the medical staff and other professional personnel, every effort should be made to arouse the interest of the hospital medical director. If possible, it is best to have him give personal leadership to the project.

3. For those hospitals that do not have a local tuberculosis association to assist them, we suggest that they contact their state tuberculosis associations and official hospital and health departments. If help is not available for securing necessary personnel or materials, it might be possible for the hospital to make a study of educational needs, include an estimate of costs, and submit this to several local service organizations (Lions, Rotary, American Legion), requesting their assistance.

Medical records on microfilm

SISTER MARY EUGENE, R.S.M., R.R.L.

MEDICAL RECORD personnel at St. Catherine's Hospital recently completed a space-saving project which at first loomed as an apparently endless task—the microfilming of approximately 100,000 patient charts, each containing an average of six to seven pages.

Total cost of the project, which was finished in 10 months and 28 days, was only about $2,200—actually $200 less than the original estimate.

Critical storage space problems had necessitated some means of reducing the bulk of the charts, and microfilming seemed the only workable solution.

To reduce expenses, all the work of sorting and filming was done by medical record department employees. This left only the actual costs of film, film file and desk reader to be paid to an outside agency. If we had used company-trained operators, the cost might have increased considerably, since we still would have had the chore of sorting the charts and preparing them for filming.

A special schedule of operations was devised to allow the department to carry out this project in addition to regular duties. Records were prepared for filming about two afternoons a week, and at these times all four members of the department worked together. Actual filming was done on days when the employees were not preparing charts. Then each of the four persons took a turn at the job, devoting about two hours apiece to filming charts.

The photographic machine was rented for $31 a month. The reader, which cost $700, was purchased by the hospital as was the $350 humidified filing cabinet. Film cost about $110 for the completed work. The project will cost about $150 a year hereafter—a comparatively small sum when the cost of filing cabinets and storage space is considered.

This modern filing system is now hospital property because of the active and enthusiastic cooperation of the medical staff. The doctors, with several of the hospital's friends, gave us the indispensable encouragement and financial assistance that were so necessary.

One of the doctors took upon himself the task of writing a letter to each of the other staff members. He explained what microfilming is and the part it would play in bringing the department up to date. He asked the doctors to help by defraying the cost and pointed out the system's advantages to them.

When the project was started our estimate was 80,000 charts for filming. A series of repeated numbering systems disclosed that there were more charts than at first had seemed possible.

The charts filmed extend from the date of the hospital's opening on November 30, 1910, through 1943. They are contained on 192 reels of film, each 100 feet long, representing almost 672,000 recorded images. The indexing of all this material was done at the time of filming and in such a manner that the location of a specific chart on any film is the work of but a few minutes.

TWO drawers of the microfilm cabinet at St. Catherine's Hospital contain 100,000 medical record charts. Sister Mary Eugene, hospital librarian (right), is shown telling officers of the Omaha Association of Medical Record Librarians about the space-saving features.

To further increase the efficiency of the system, an alphabetical master patient index file now is being set up for every patient admitted to the hospital.

In the future, charts will be kept in their original form for five years in addition to the current year. One year's charts will be filmed each year. In 1950, for example, we plan to sort and film all the 1944 charts.

The five-year waiting period was decided upon because we have found that the period of greatest activity for a chart is within that range of time. Also, in a teaching hospital it is well to keep a sufficient number of original charts on hand for study by interns and residents.

Both the medical and administrative staffs at St. Catherine's Hospital are well satisfied with the introduction of this method of storing medical histories. The doctors are especially pleased to find that when they call for an old record it is available on film right in the medical records department. Before the microfilming project was begun, records from 1910 through 1947 were stored in the hospital garage down the street and on the other side of the block.

Sister Mary Eugene is medical record librarian of St. Catherine's Hospital, Omaha, Nebr.

The fire in Davenport

EARLY REPORTS ON THE FIRE at the St. Elizabeth's psychiatric building of Mercy Hospital in Davenport, Iowa, naturally do not assemble the details of what happened and why, but all administrators should be reminded once more that it is impossible to take too much precaution against such disasters.

A great amount of literature on the prevention and control of hospital fires is being accumulated. A recent check showed that more than 30 magazine pages in HOSPITALS alone had been devoted to this subject during the previous year.

Protective equipment can be purchased to reduce if not eliminate the fire hazard in any kind of building, but the big deficiency is in education.

Board and administrator have an obligation to be fire conscious, they must be willing to spend what is necessary on remodeling and equipment, and they must see that employees are thoroughly trained both in prevention and rescue.

After a tragedy has struck, it is very easy to see errors and omissions and to condemn those responsible for management. Patients often are not fully protected, however, even though the management has complied with local laws and sought the advice of local authorities. Occasionally both the management and the community have a hard decision to make: If the money necessary for remodeling and equipping a very old building simply is not available, should the hospital be closed and the community left without this essential service—or should an effort be made to carry on under such adverse circumstances?

In most cases, the decision is to carry on, but the time may be coming, if it has not arrived, when hospital organizations will have to view this situation with a colder calculation: Whether the question is bed capacity or fire safety, a community deserves only the kind of hospital service it is willing to pay for.

MacEachern and Hawley

ALTHOUGH THE ANNOUNCEMENT that Dr. Paul R. Hawley would replace Dr. Malcolm T. MacEachern as director of the American College of Surgeons came as something of a surprise, this change is filled with pleasant prospects.

In military service, in the Veterans Administration and as coordinator of the Blue Cross-Blue Shield activities, Dr. Hawley has exhibited an unusual talent for leadership. Such talent can be used to advantage by the college of surgeons as it could by almost any organization, and so Dr. Hawley takes over his new assignment with the confidence and good wishes of just about everyone who has ever worked with him.

EDITORIALS

Dr. MacEachern had devoted 27 years to the college, and *devoted* does not adequately describe the nature of his service. Even after the change on March 1, he is to carry on the hospital approval program, which he built from almost nothing to the college's most significant activity. Someone else might have done the same thing, but few others could personally have contributed so much to the betterment of patient care.

Everyone agrees that the patient's interest supersedes all other interests in a hospital, but backsliding is not wholly unknown. It has been Dr. MacEachern's job for 27 years to round up the back-sliders, and he has done this in such a way as to offend only those who did not really believe that the patient comes first.

If the announcement means that he can proceed as before, with wholehearted support from the college, hospital administrators, boards and staff members all may be thankful.

A year of opportunity

THE EIGHTY-FIRST CONGRESS settles down to work with hospitals more or less surrounded by embattled political forces. Since this is an election year, it has been taken for granted that the administration would force some kind of showdown on several issues, including compulsory health insurance, aid to professional education and the establishment of a cabinet department that wraps health, welfare and education into a single package.

As this issue of HOSPITALS went to press, however, there was little enough on which to guess the course of events. President Truman had recently made his report to Congress, asking only for an adequate medical insurance program. By itself this could be interpreted as a sign that the President did not intend to push legislation for compulsory health insurance.

At the same time, Federal Security Administrator Oscar R. Ewing was touring Europe and publicly approving the assorted compulsory in-

surance plans abroad. By some it was thought that this would lead to a strong new drive for the administration's old program. By others it was muttered that Mr. Ewing had lost the President's support and thus was singing his swan song.

It could also be surmised that all this was a bit of long range political strategy: That the administration would merely go through the motions of pressing for compulsory health insurance legislation, smoking out the dissenters with a few showdown votes and saving the real crusade for next fall's election campaign.

Not many years ago the people's health was thought to be above politics, but a decade of political campaigning for socialized medical and hospital care has left its mark. It has aroused political support for alternative national health programs, and this has had the effect of forcing the health professions to abandon their time-honored attitude of dignified silence.

More and more the representatives of these professions are asked for expert opinion on what can and what cannot be done. Whether they are valued most as a source of unbiased information or as window dressing is not always clear, but for one reason or another their testimony is in demand.

With this much in common, it probably was inevitable that the several health professions would get together, and so it has happened. The Inter-Association Committee on Health has been formed by the American Dental, American Hospital, American Medical, American Nurses, American Public Health and American Public Welfare associations.

This new organization is not political, much less partisan, as anyone knows who is familiar with the divergent policies and convictions of its constituent bodies. At the same time it is more representative than any political philosophy, for it is the voice of voluntary initiative.

Such a voice is needed this year and in the next few years. Members of Congress are as responsive to public opinion as they know how to be, and the American people apparently are reluctant to trade off their voluntary system, even with its faults. Yet neither members of Congress nor their constituents back home can forever remain impervious to the appeal of something for nothing, if the voluntary system sits mute with no program of its own.

Times are such that the Inter-Association Committee on Health has a great opportunity. It cannot succeed if it simply opposes all help from the federal government, nor if it tries to behave like a run-of-mine pressure group, nor if it is unable to get beyond a series of platitudinous resolutions.

The American people at best have a vague understanding of volunteerism as opposed to government paternalism. They hold the health professions in high regard, but they don't know why. They would like to know what has made the voluntary system work so well. They presumably would like to keep this system if they have assurance that it can do as well on a larger assignment.

Of course there have been a great many and a great variety of efforts to "sell" the voluntary philosophy, and they have not been in vain, but increasing political pressure calls for even more effective effort. This is the opportunity that confronts the inter-association committee.

Master Menu dividends

ONE YEAR HAS PASSED since the Master Menu was offered as a means of improving the food service in hospitals, and this first annual report is a pleasant one.

The Master Menu was conceived as a service that could help hospitals of all sizes and kinds. Those without dietitians, or without enough of them, could adopt the complete service. Making only such changes as local conditions required, an administrator or an over-burdened dietitian could simply have the recommended menus copied from HOSPITALS and posted on the kitchen wall charts with assurance of a uniformly good food service.

The head dietitian in a larger hospital that is adequately staffed would be less likely to adopt the complete service, but she surely could make good use of the thousand-plus menu suggestions, covering one general and seven special diets, that would appear monthly in HOSPITALS.

During the Master Menu's first year, there has been an abundance of evidence that these hopes and plans were sound. It was expected that smaller hospitals would be first to see the advantages, and this has been the case. It was supposed that larger hospitals would soon find ways to adapt the service to their own problems, and this too is happening.

An unusually good example of such adaptation is described currently in the Dietetics Administration section. Here is a report from a hospital that is using the service to solve a half-dozen problems. To quote the author:

"We are very pleased with the Master Menu and now it is an integral part of our dietary department. It has been of great value in reducing to a practical minimum the number of diets. It has saved work and simplified planning. In the comparatively brief time that it has been in use, it is pointing the way to decreasing food costs and conserving time in food preparation."

This article on page 86 is recommended to administrators and dietitians in all hospitals where the Master Menu's possibilities have not been thoroughly explored.

Hospital care in the home

(Continued from page 38)

In the care of the tuberculous patient at home, we departed from the usual procedure in that, at regular intervals, patients are picked up by a special bus and returned to the hospital for examination.

Home care seems to be particularly successful with this type of patient since it is a definite psychological boost for a person to be back in his home environment after a long period of hospitalization. These patients are so enthusiastic that when they make return visits to the hospital they are responsible for numerous applications for home care service from other patients.

STATISTICAL ANALYSIS

The following statistics are presented with the reservation that, since they concern only the first six months of operation, their significance is limited.

In this period there was a steadily increasing volume of patient referrals and transfers—reflecting closely the development of smoothly operating organizations in the five hospitals.

The sixth month (May 1949) showed the largest volume of activity and can be considered as a reliable approximation of typical experience to be expected.

Number of patients: The total number of patients transferred to the home care service during the first six months was 822.

The growth of the patient load, on the whole, was steady in all five hospitals, although some gained momentum more rapidly than others. The activity in any particular hospital is affected seriously by the enthusiasm of the physicians heading the service and by the willingness of the visiting staff to cooperate.

By May 31, the end of the period under survey, the home care case load was as follows:

Kings County Hospital	142
Queens General Hospital	146
Morrisania City Hospital	57
Bellevue Hospital	62
Goldwater Memorial Hospital	31
Total	438

In the larger hospitals (Bellevue, Kings County and Goldwater) these numbers represented only minor fractions of their total case loads (patient census). In Queens General and Morrisania Hospitals, however, the 146 and 57 patients, respectively, constituted 18 and 8 per cent, respectively, of the total patient loads.

Number of patient days: A total of 38,767 patient days of care was provided. In the following tables the growth of the service is well demonstrated.

Analysis by months

Month	*Patient Days*	*Percentage Distribution*
Dec.	767	2.0
Jan.	2,324	6.0
Feb.	3,951	10.2
Mar.	7,788	20.1
Apr.	10,670	27.5
May	13,267	34.2
Total	38,767	100.0

Average days care per patient: In a developing program like this one, there is a large disparity between the number of patients admitted (822) and the number discharged (357) during the same period. To obtain a meaningful average of days' stay, we determined the total number of days care rendered to the patients discharged from home care service during these six months and divided this figure by the number of patients discharged. The average days' care thus computed amounts to 32.8 days.

Age distribution: There were 264 patients who were 50 years of age or younger. This amounts to nearly one-third of the whole group (32.2 per cent). It includes 28 children of 12 years or younger, who accounted for 3.4 per cent of all patients. This seems noteworthy in view of the fact that several of the hospitals had not yet begun to transfer children to the home care service.

Analysis by age

Age Group	*Patients*	*Percentage Distribution*
Under 13	28	3.4
13 to 20	42	5.1
21 to 30	48	5.9
31 to 40	62	7.6
41 to 50	84	10.2
51 to 60	162	19.7
61 to 70	240	29.2
Over 71	156	18.9
Total	822	100.0

Principal diagnosis: Of major interest is the fact that 48 per cent of the patients were being treated for cardiovascular diseases and about 5 per cent for fractures of various kinds. Most of the remainder presented long-term systemic diseases characteristic of the over-50 age group, which as shown above accounted for about 68 per cent of the total caseload.

Applicants for home care

Hospitals	All applications		Accepted applications — *Number*		Accepted applications — *% of total*	
	6 months	May	6 months	May	6 months	May
Kings County	511	92	309	60	60.4	65.2
Queens General	565	124	255	67	45.1	54.0
Morrisania	250	54	104	32	41.6	59.3
Bellevue	177	32	112	21	63.2	65.6
Goldwater	347	30	42	10	12.1	33.3
All hospitals	1,850	332	822	190	44.4	57.2

Cases discharged: The total number of home care patients discharged was 357. Although it was necessary that a relatively high number of "discharged" patients be returned to the hospital ward, this may be regarded as a reflection of the usefulness of home care for the patient suffering from long-term disease—a type of ailment very often characterized by alternating periods of remission and exacerbation.

Home care is particularly valuable in permitting the treatment of the terminal cancer patient in his home and among his family. This group of patients accounts primarily for the case fatality rate of 8 per cent of all patients discharged.

Analysis of discharged patients

Reason for Discharge	Number	Percentage Distribution
Cured	74	20.7
Referred to O.P.D.	54	15.2
Returned to ward	200	56.0
Died	29	8.1
Total	357	100.0

Services rendered: Our experience seems to indicate that during the early stage of a patient's stay at home, an above average amount of personal service is required. The patients who return to the hospital probably will require a similarly increased volume of personal service during the concluding period. It would be reasonable to conclude, therefore, that a low rate of patient turnover usually is accompanied by a low rate of personal services. It should be reiterated, however, that more extensive experience is needed before we can draw conclusions sufficiently valid to establish standards.

Services rendered

Home visits by	
doctor	3,051
nurse	7,158
medical social worker	1,104
physiotherapy technician	628
occupational therapy aides	41
Hours of housekeeper service	5,061

Since only the sixth month (May 1949) can be considered as beyond the stage of experimental and initial growth, the following analysis is limited to that month, during which a total of 12,818 days care were rendered and during which the average daily census was 414.

Cost of operation

Personal service	$ 91,947.24
Including medical and nursing care, social service, physiotherapy and occupational therapy aides, housekeeping service, chauffeurs, stenographers and clerks.	
Equipment and supplies	513.00
Based upon a liberal "use" expectancy and including full cost of expendable items.	
Vehicle operation and maintenance	518.31
	$ 92,978.55
*Overhead costs (at 8 per cent)	7,438.28
Total cost of operation (Dec. 1, 1948, to May 31, 1949)	$100,416.83

The cost per diem per capita, based upon 38,767 patient days, was $2.66.

*Contributory services by departmental and institutional administrative staffs, and includes proportionate cost of such items as heat, light and cleaning.

Services in May 1949

Visits by	Number	Rate per 100 patient days
Physician	828	6.5
Nurse	2,343	18.3

ACCEPTANCE OF PATIENTS

During the initial six-month period, 1,850 applications for transfer to home care were processed, of which 822, or approximately 44.4 per cent, were accepted. During the month of May (the last of the six months), 332 applications were made, of which 190, or approximately 57 per cent, were accepted.

As will be noted in the accompanying tabulation, sufficient experience had been acquired in the sixth month to increase the average number of acceptances to 57.2 per cent of all applications considered. Two of the hospitals, however, had an acceptance rate of approximately 65 per cent in the sixth month and only slightly less as an average for the entire six months. The factors which influence acceptability are complex and varied, and we may not be able to increase materially this acceptability rate of approximately two out of three patients considered.

OPERATING COSTS

From the point of view of costs, our Home Care Service already has proved itself eminently successful. We find that the cost of operation per patient per day is $2.66, which is approximately 25 per cent of the similar cost for ward patients in our general hospitals. Our per diem per capita cost for the general hospitals in 1948 was $10.38.

The accompanying table, headed "Cost of operation," shows that the total cost for the six months was $100,416.83.

The large saving in operating cost, of course, is obvious. It also can be said, however, that the adequate hospitalization of 414 patients (the average home care census for May) would require a hospital which, today, would cost well over $8,000,000 to erect and equip.

The growth of our Home Care Service has fully met our expectations and, during this short period of six months, has had a gratifying success in reaching the objectives we had set for it. We feel that it has amply demonstrated its great value as a useful technique in the provision of hospital care for the medically indigent.

DIFFICULTIES

As its plan of organization and procedure was put to the test in actual operation, however, certain difficulties arose.

One recurring difficulty is the antagonism against the home care plan among the visiting staffs of a number of our hospitals. This is reflected immediately in a similar antagonism on the part of the house staffs. The physicians who oppose the home care plan do so out of fear that the extension of hospital service into the home is a

step in the direction of socialized medicine. Members of house staffs are fearful of the additional work that a home care program will impose upon them. In actual practice it turns out that an assistant resident spends a relatively short period of his residency time on home care visits and that once he has been started on this service he is very thankful for the experience of seeing patients in their home environment.

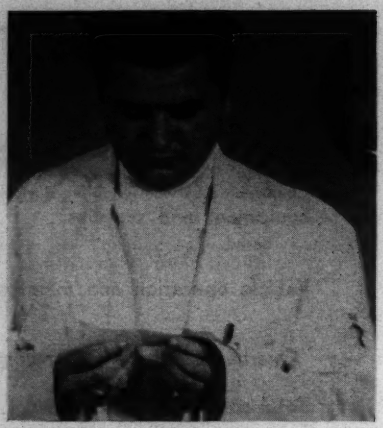
A prime requisite in the operation of a home care program is the efficient selection of clinically suitable patients. In the original draft of organization, this function was to be in the hands of a resident in the Home Care Service. Since such an individual would devote all his time to this work and none to the regular clinical services, he could not expect any specialty board approval.

As was to be expected, it has been difficult to obtain qualified young physicians who will take such positions, and the function of patient selection, in some instances, has become less regular and efficient than is to be desired. In an effort to correct this defect, it has been decided to try a plan (in three of our hospitals) whereby a qualified member of the visiting staff would act as "clinical supervisor" (on a fee per session basis) with the responsibility of (1) directing the selection of ward patients who are clinically suitable "for home care" and (2) supervising the work of the assistant residents who visit the patients, by means of conferences and the examination of the case records.

It is also anticipated that this plan will serve to increase the interest of the visiting staff in the successful operation of the home care plan.

NURSING

The use of the visiting nurse services of New York and Brooklyn and the Public Health Nursing Bureau of the Department of Health, for the provision of nursing service in the home, has been altogether successful. The administrators of these organizations express much satisfaction in the following passages quoted from their reports:



THE DOCTOR conducts an examination of the electrocardiogram (tracing) on the spot.

"The home care program administered by the Department of Hospitals at Kings County Hospital in Brooklyn has on the whole proved very satisfactory. Patients are more secure because they have been hospitalized long enough to have all the tests required to make a correct diagnosis and to prescribe treatment. They are then ready to go home, knowing they will remain under the care of the same doctor who knew them in the hospital, and that should it become necessary, they can return to the hospital at any time."—*Visiting Nurse Association of Brooklyn, Inc.*

"When we consider the extent of this program and the many administrative problems involved, we believe that to date the program has run very smoothly in relation to the provision of home nursing service."—*Visiting Nurse Service of New York.*

"Judging from the comments of the nurses giving this care, it is apparent also that they are finding it a rewarding experience. The public health nurse, as she goes about her work in the community, hears many expressions of satisfaction from the patients and families about the medical and nursing service. Many stories could be told of the happy situation she finds in the homes of patients who, after many months of separation from their families, find that the hospital has come to them. There seems to be an improvement in both the physical and emotional status of the patient and a greater tendency for him to help himself."—*Public Health Nursing Bureau, Department of Health, City of New York.*

Such difficulties as have developed in this system of nursing visits have been minor and capable of easy adjustment. Among these minor "rough spots" are: (1) A tendency to send the patient to his home before the visiting nurse service has had the required three to five days notice; (2) a tendency to delay in the interchange of information, concerning the patient, between the hospital nursing staff and the visiting nurse service; (3) the occasional delays in billing caused by the fact that we still require the visiting nurse service to bill each hospital served.

AUXILIARY SERVICES

Dietary: The need for coordinated supervision of the special diet requirements of many of these patients has become apparent and it is planned to provide a nutrition-consultant service, which will serve all of the hospitals concerned.

Clinical laboratory: Since a large proportion of the home care patients require periodic clinical laboratory examinations, such as blood and urine tests, it has been found necessary to provide "visiting" laboratory technicians who, after proper training, also will serve to take x-ray plates and electrocardiograms and perform similar duties. These technicians use portable equipment.

Housekeeping: The principle of housekeeper service, supplied on an hourly basis, has proved quite successful. Our rate of pay of 75 cents per hour, however, is often lower than that paid by other agencies, which pay 85 cents to $1 per hour, and we frequently find difficulty in obtaining suitable workers.

Social service: This facility has proved quite efficient, primarily because of its inherent adaptability. Although preliminary visits to the home are to be desired, a temporary lack of adequate transportation has made it impossible in many instances to make such visits. The suitability of the home has had to be determined by means of family interviews. There have been remarkably few instances wherein a wrong evaluation of the home conditions has been made.

Transportation: This essential service has, on the whole, proved inadequate. Our experience indicates that at least one passenger car must be provided (for the transportation of doctors, technicians and social workers) for every 50 patients in the Home Care Service. In addition, one ambulance is needed for every 300 such patients.

Rehabilitation: This service, with-

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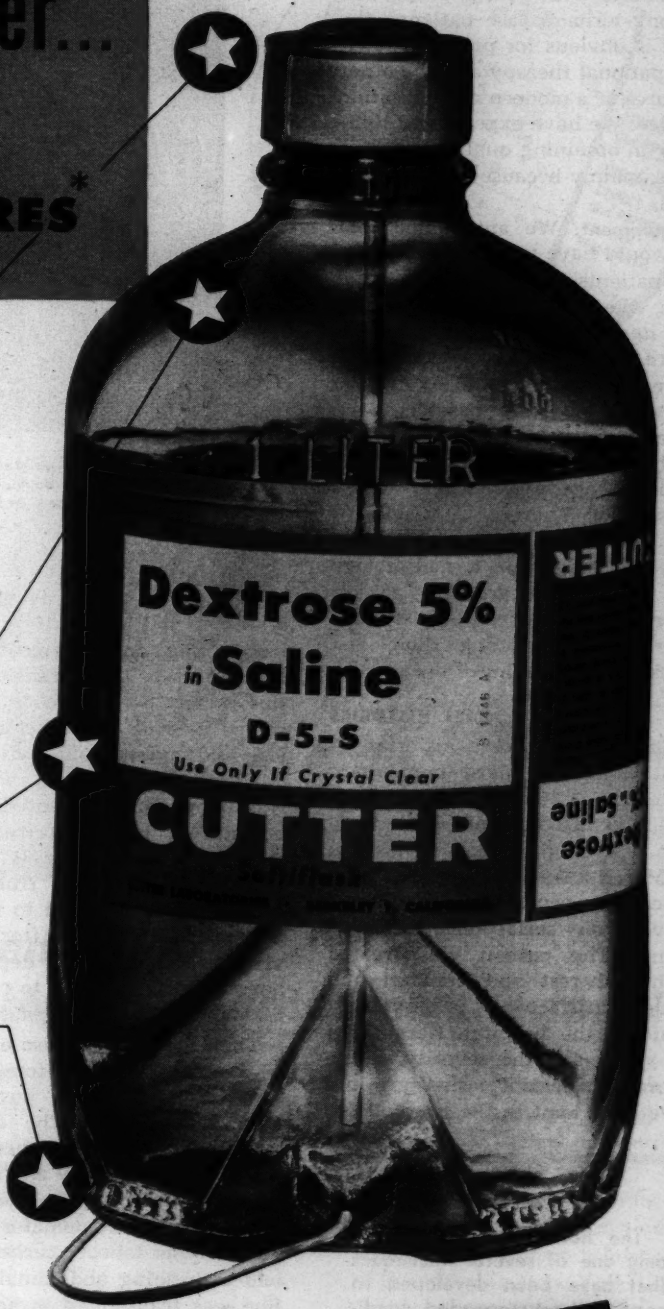

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out doubt, will be of major importance as the home care program reaches maturity and a stability of procedure. With a large proportion of long-term disease patients, the need is obvious for physiotherapy, occupational therapy and the other features of a modern rehabilitation service. We have experienced difficulty in obtaining qualified technicians, mainly because of our salary levels.

Equipment: We anticipated that we would have to furnish many of the patients' homes with hospital beds, wheel chairs and other essential items of hospital equipment. There is not too much demand for these items and our first six months of experience show practically no losses.

The vast majority of the patients on home care service express great satisfaction. Those in the small but pathetic group of patients in the terminal stages of a malignancy are particularly grateful, as are their families, for the opportunity afforded of spending their last weeks with their loved ones.

RECOVERED, the patient is able to resume his normal productive life. Efficient hospital care in his home, with his family, has facilitated his recovery and has made another hospital bed available for a person who urgently needs inpatient care.

CASE HISTORIES

The following case histories illustrate some typical home care patients.

G.F. is a 33-year-old white male who was admitted to the hospital on March 2, 1949. Diagnosis established was acute coronary infarct proved on serial electrocardiograms. The patient was treated with bed rest and demoral and made satisfactory improvement while in the hospital. Because of his youth and the severity of the infarct this patient normally would have been kept in the hospital for six to eight weeks. It was felt, however, that his treatments could be continued on the home care program, and he was transferred to this service on March 30. He received careful and constant medical and nursing supervision and did very well at home, where he was happy and contented. In the hospital he had been fretful and apprehensive. On May 31 this patient was discharged from home care and was referred to the outpatient department. After several visits to the outpatient department he was deemed ready to return to his job as a railroad signalman.

Then there is the case of E.F., a 36-year-old colored female who was admitted to the hospital on February 3, 1949. The diagnosis in this case was established by exploratory laparotomy and biopsy—adenocarcinoma of the ovary with generalized carcinomatosis. This patient was febrile, cachexic, and had a draining abdominal wound. She was transferred to home care on March 2 as a terminal case, but she made a remarkable recovery in her physical condition while at home. The abdominal wound healed, temperature became normal and the patient gained 45 pounds. She was brought back to the hospital to see the doctors who had operated on her and they did not recognize her. This patient has since gone to visit her family in the South and she made the long trip by coach and alone. We were informed that she arrived at her destination in good condition.

A.D. was a 43-year-old white male who was admitted to the hospital November 30, 1948. Diagnosis in this case was posterior lateral sclerosis of the spinal cord, with weakness in both legs. When the patient was transferred to home care he was unable to walk, his condition was weak and he had severe pains in the back. The patient received an average of three treatments each week and his condition improved remarkably. Now he is able to walk and to go out for short walks by himself. He gained 15 pounds on home care and has a sense of well-being which he attributes to the fact that his body is stronger. It is felt that this patient has made a remarkable improvement, which can be traced directly to the beneficent effect of being in his own home with his family.

The extension of hospital care into the home is definitely here to stay as a useful tool for the provision of comprehensive hospital service. Our next step will be to extend hospital care into nursing homes for those of our patients who are clinically suitable but who lack a proper home.

Other programs

The home care program is only one of several techniques that have been developed to cope with overcrowded conditions in New York City's municipal hospitals. Other programs call for:

1. **Reorganization of outpatient services.**
2. **Elimination of bottlenecks in x-ray and laboratory services.**
3. **Development of rehabilitation facilities, coupled with a dynamic approach to the problem of long-term illness.**

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A two-part program designed to control infant diarrhea

DURING THE YEARS 1942 through 1947, 28 nursery epidemics of diarrhea came to the attention of the New York State Department of Health. These epidemics involved 618 infants and caused 62 deaths.

To cope with the problem, a control program of two parts was initiated in 1948. The initial step brought an extensive educational campaign; this preceded a regulatory program that became effective January 1, 1949.

The educational program was sponsored jointly by the state health department and the Medical Society of the State of New York to acquaint hospital administrators, physicians and nurses with the new minimum standards.

The standards, briefly, require: (1) Terminal sterilization of the formula in individual feeding bottles with nipples and caps attached, (2) certain principles of isolation, (3) the use of the suspect nursery system for observing infants with suspicious signs of illness, (4) individual care for each infant with his own equipment, (5) careful hand washing by physicians and nurses after coming in contact with any infant, (6) adequate space for nursing care, (7) adequate numbers of nursing personnel, and (8) a limit of 12 infants to each nursery.

The Public Health Council adopted the new standards with the full realization that reconstruction is costly and time consuming and that additional nurses cannot be employed and trained overnight. For these reasons, provision was made to defer, until January 1, 1951, enforcement of the requirements specifying floor space allowances, maximum number of infants per nursery and the maximum number of infants to be given care by one nurse.

Noncompliance varied greatly. A survey of 224 of the 226 upstate New York hospitals and maternity homes with nurseries for newborn infants showed that only 3.7 per cent had failed to meet the requirements for isolation facilities, while 65.6 per cent failed to meet the space requirements. The requirements and the percentage of institutions not meeting them, follow:

Requirement	*Per cent not meeting requirement*
Nurse-baby ratio of 1:12 around the clock.	33.0
24 square feet of floor space per infant or cubicle.	65.6
Not more than 12 infants per nursery.	45.0
Intercommunicating nurseries prohibited.	12.7
Isolation facilities—permanent or temporary.	3.7
Individual equipment for each infant except for weighing scales.	52.8
No common carriers for bassinets.	35.9
Hand washing facilities in all nurseries.	25.6
Formula in individual feeding bottle at the time of preparation, with nipple and cap attached.	20.7
Terminal heating of the formula.	57.8
Bulk storage of formula prohibited.	24.1
Separate nurses for sick and well infants.	14.3
Individual care of infants.	55.2
Common bath table prohibited.	55.4
Common dressing table prohibited.	55.2

From this tabulation it can be seen that overcrowding, understaffing, lack of hand-washing facilities, common equipment, common bathing and dressing tables, and lack of protection afforded by terminal heating of formula were problems of considerable magnitude in the 224 hospitals surveyed.

Every effort will be made to continue the program for the control through minimum standards of nursery care on an educational level. Three resources will be available through the local health officer: (1) Consultation services from the State Department of Health; (2) distribution of appropriate manuals of recommended procedures; (3) a demonstration and training center in the Brady Maternity Hospital in Albany.

This training center will be utilized to give public health nurses actual experience in carrying out simplified techniques and meeting the sanitary code requirements; to give short-term intensive training to nurses from hospitals in need of a system; and to demonstrate to health officers and other physicians the recommended procedures in actual practice.

Emphasis throughout has been placed on simplification of techniques, use of existing equipment and careful study of each hospital's problem to avoid expenditures beyond the individual hospital's needs and the resources of each community.

In discussion of this program, in the *New York State Journal of Medicine* for December 1949, Dr. Ray E. Trussel of Albany comments that "it is impossible at this time to evaluate the long range results of this control program."

Almost a year has elapsed since the initiation of the educational program based upon the new standards. There were two epidemics in progress in May 1948. In July 1948 there was one bizarre explosive outbreak, which was self-limiting and nonfatal. The same hospital recently had another nonfatal outbreak. No epidemics have been reported from the other 225 hospitals and maternity homes in the past 12 months.

No lasting importance is attached to this analysis at present,

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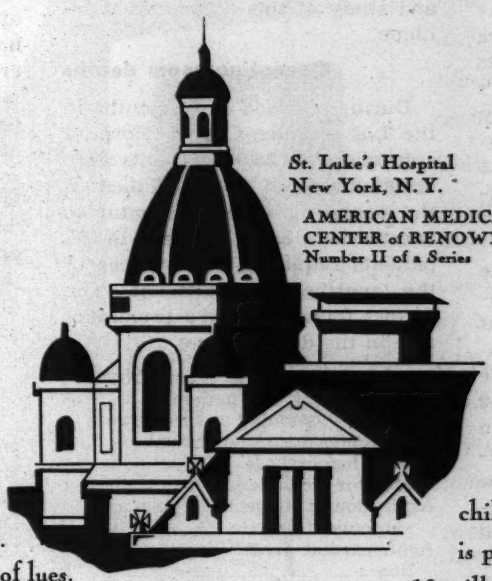

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TRANSMISSION—Maternal syphilis is transmissible to the fetus through the placenta, infection usually taking place during or after the fourth month.

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DURATION—Untreated, subclinical syphilitic infection may persist for many years. Tertiary lesions may later develop in skin, bone, viscera or central nervous system.

PROGNOSIS—Pregnancy seems to attenuate the virulence of syphilis for the mother. For the child, the prognosis in the untreated is poor. Untreated, about 1 infant in 10 will develop acute syphilis, one-third of these being born dead, prematurely or at term. Adequate prenatal treatment will save most of these babies — almost 100 per cent of them, if given during the first half of pregnancy.

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as similar epidemic-free periods have occurred in the past. The cooperation of hospitals in this program has been excellent.

Dental internships

Thirty-seven dental internship and 16 residency programs have been approved by the American Dental Association's Council on Hospital Dental Service and reported in the *Journal of the American Dental Association* for November, 1949. Approval has been granted on the basis of questionnaire evaluation of the educational facilities of each hospital and investigation by inspectors. The bases of approval are the requirements established by that association's house of delegates in 1946. Only those programs conducted in hospitals whose dental appointments have been approved by the Council on Hospital Dental Service are included.

Thirty-one dental schools in the United States have been fully approved by the Council on Dental Education, seven have been provisionally approved, and two have been partially approved. These 40 schools accepted 3,161 students in the 1949-1950 class. This represents a 45 per cent increase in the number of dental students entering all the 39 dental schools that existed 10 years ago.

Diagnosis of pregnancy

In addition to several species of frogs and toads well known to laboratories, the common leopard frog *(Rana pipiens)* now has been used successfully to diagnose pregnancy. Hormonal assays were made on 300 consecutive urine specimens sent to the laboratory of the Mallory Institute of Pathology of the Boston City Hospital for the diagnosis of possible pregnancy.

Approximately 90 per cent accuracy has been achieved, using the male frog *Rana pipiens*. One false positive reaction, now believed to be readily avoidable, and 12 false negative reactions were encountered within the first month of amenorrhea of normal pregnancy.

Several positive reactions were correctly obtained in other cases within the first four days of amenorrhea. This indicates that the problem is not one alone of insensitivity of the frog to the chorionic gonadotropic hormones but of varying hormone levels in individual pregnancies. The results, reported in the *New England Journal of Medicine* for July 1949, appear to justify the continued use and study of this diagnostic technique.

The Medical Review department is edited by Charles T. Dolezal, M.D., secretary of the Council on Professional Practice.

Operating room deaths

During a period of 21 months in the Los Angeles County Hospital approximately 28,000 patients were anesthetized. Of these, 46 died in the operating room incidental to anesthesia or operation—one in 608 patients requiring the services of the anesthesia department. The factors found to play a prominent role in the deaths were:

Shock related to the preoperative condition of the patient	14
Pulmonary embolus or cardiac catastrophe during operation	6
Severe hemorrhage	4
Circulatory collapse	4
Aspiration of stomach contents and subsequent anoxia	4
Acute cardiac arrest during operation	3
Cardiac arrest due to reflex on induction, emergence or light anesthesia	3
Laryngospasm and subsequent anoxia	2
Respiratory and circulatory failure following spinal anesthesia	2
Convulsion	2
Immediate postoperative atelectasis	1
Immediate postoperative tension pneumothorax	1

In *California Medicine* for November 1949, Dr. John B. Dillon says that if deaths relating to operation and anesthesia are to decrease it appears essential that cases of operative death be discussed objectively and in light of individual circumstances.

After analysis of each of the factors studied, Dr. Dillon concluded that in the majority of cases death in the operating room was ascribable to preoperative conditions to be expected in a large general hospital.

He emphasized the necessity for careful study of the patient's preoperative condition and indications for surgery, the correction of such defects as a sudden fall in blood pressure, and the necessity of removing stomach content prior to emergency operations.

In summary, he concluded that some of the causes of deaths in the operating room are related to anesthesia. In some cases death occurs because of lack of understanding of certain factors that are subject to control by the surgeon or the anesthetist.

Simple comparisons of the rate of deaths from such causes in one hospital with the rate in another are meaningless because of the many variables involved, such as the size and type of hospital, type of patients and training of personnel. A better avenue to the knowledge that may prevent untoward death is exposition of the causes in each case. By this means the causative factors may be fully disclosed, emphasized and guarded against.

Nondetachable restraint strap

A time-saving device for transporting anesthetized patients on stretchers is described in *Anesthesiology*, September 1949, by Dr. Daniel C. Moore of the Mason Clinic, Seattle, Wash. It is a safety belt permanently riveted to operating room carts.

Two recangular slots, ½x2½ inches, are cut on each edge of the ordinary hospital operating room cart midway between ends. A belt buckle arrangement is inserted through the slots and riveted to the cart.

This type of restraint has many advantages. The belts are never lost, used for other purposes or left in the patient's room. Heavily medicated patients are reminded that the guerney is narrow and are mildly restrained on the cart, thus preventing falls and injuries.

An anesthetic may be administered to a patient on the cart with adequate control during the excitement period. He is more easily restrained while being transported to his room during the post-anesthetic excitement stages which begin when the patient regains his reflexes in the operating room.

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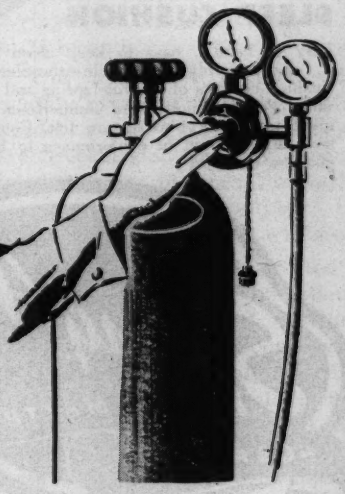

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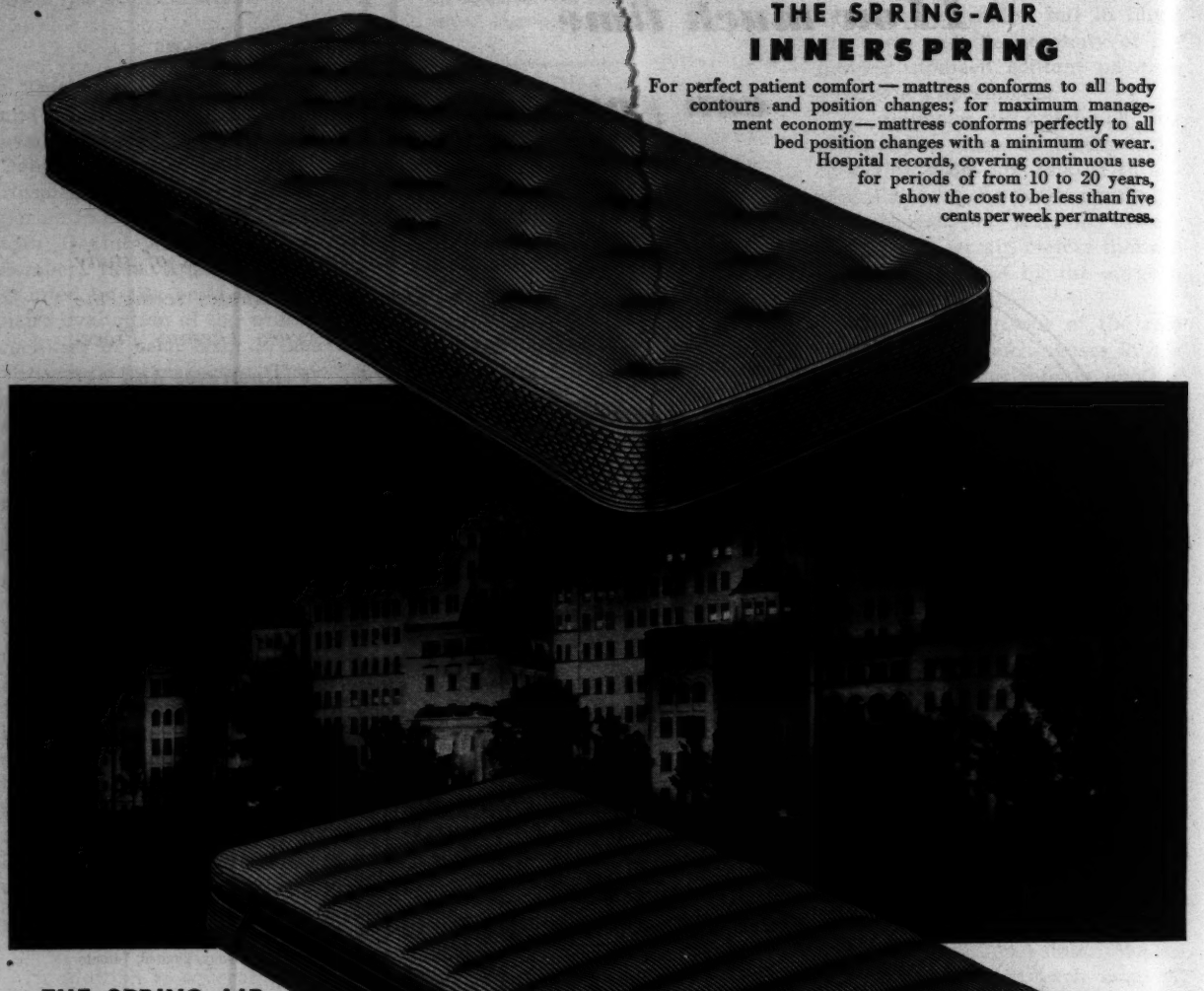

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Research can mean economy in the purchasing department

ROBERT WHITEFOOT JR.

RESEARCH IN THE purchasing department can be looked upon as a continual process in the procurement of quality items to perform a given task more efficiently or at possible lower cost. The efficacy of research in purchasing has been proven in the Johns Hopkins Hospital many times.

Research starts at home. This means a thorough knowledge of the manufacturing processes and the eventual use of the manufactured item. Most purchasing research is prompted by problems that present themselves during usage or procurement. Practically every purchasing agent can refer to one or more cases in which research studies have led to substantial savings.

The average hospital purchasing agent has little time for so-called "purchasing research." The truth of the matter is: An efficient purchasing agent cannot afford *not* to spend a great deal of time on research problems which may eventually involve the use of a better product at reduced cost to the hospital.

Seemingly trivial matters may instigate research. It may be a specific problem brought up by the operating room nurse, the storekeeper or one of the physicians. Perhaps it is an idea given by a sales representative, or it could be something overheard at a convention.

Months ago an analysis of 393 broken hypodermic syringes was made at our hospital. Fifty-six per cent, or 219 of these syringes, showed tip breakage. A survey of procedures brought to light the following: Some sizes, especially 2cc and 5cc used for penicillin, were being washed and sterilized by boiling on the floors, usually with plunger and barrel separated. Occasionally, medicine glasses were boiled with the syringes. Regular pickup forceps were being used to remove the syringe from the sterilizer. Some syringes were washed and the barrels left standing on end to conserve space while drying.

CARE OF SYRINGES

These observations led to the issuance of a directive requesting that both the plunger and barrel be moistened and then sterilized intact. Care should be taken that the plunger is pushed the entire length of the barrel and meets the barrel base.

This procedure reduces erosion on the ground surfaces, thereby prolonging the life, and eliminates the need for assembling the parts after removal from the sterilizer. Medicine glasses were not to be boiled with syringes. An improved type forcep reduced the hazard of breakage caused by syringe slippage during transfer. After thorough washing it was suggested that the syringe be placed flat on a work table rather than on end.

Many institutions soak syringes in detergent solutions before washing. This practice, if overdone, will lead to a rapid deterioration of ground glass syringe surfaces and will contribute to early replacement. Surveys show that tip breakage can be reduced by the use of a lock-type and metal tip syringe. We are in a period when parenteral techniques are expanding, and new parenteral drug usage is developing to the point where handling, breakage and equipment costs are important.

Hypodermic needle usage is closely connected with syringe usage. If a hospital is not now engaged in the resharpening of needles, it probably will be profitable to look into the use of an electric needle-sharpening machine to rehabilitate needles that otherwise may be discarded because of dullness or burrs.

Writing in the *American Journal of Nursing* for November 1948, Catherine A. Bindel, R.N., of Wesley Memorial Hospital, Chicago, told of some profitable research her hospital had conducted with syringes. The average monthly usage of 2cc syringes at Wesley jumped from 5,566 in 1946 to 30,000 in 1948. After experimenting with double-thickness muslin wrappers, then with 40-pound kraft paper wrappers, the hospital finally hit upon metal tubes, constructed to hold an assembled 2cc syringe with the needle attached.

A study showed that, in a given time, one worker using metal tubes could prepare twice as many syringes as she could when using the paper wrapper. Another study showed that nurses who required two and one-half minutes to open six paper-wrapped syringes and attach them to needles could take the same number of assembled syringes out of metal tubes in 20 to 25 seconds.

"Our needs are covered adequately by about 900 tubes," Miss Bindel wrote. "No replacements are necessary so the only expense involved after the initial outlay is for occasionally supplying the tubes with new caps and washers."

Research recently corrected a situation concerning complaints about the dullness of #15 surgeons' blades. After reports were received in the purchasing office indicating that a particular brand of #15 surgeons' blades was not satisfactory, we asked the manufacturer's representative to discuss with us the validity of the complaints. A discussion period en-

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Mr. Whitefoot is assistant purchasing agent, the Johns Hopkins Hospital, Baltimore. Adapted from a paper presented at the Ninth Annual Conference, Maryland-District of Columbia-Delaware Hospital Association, Wilmington, Del., November 1949.

abled the manufacturer and the hospital to profit mutually through a change in honing procedure at the plant. Hospitals everywhere profited as a result of our ability to spend enough time on this problem to conquer the previous difficulty.

Manufacturers appreciate criticism or compliments from users of their products, and generally they welcome visitors to their plants. These visits not only enhance the purchaser's knowledge but sometimes create a better product because of an exchange of ideas.

Through exhaustive studies and tests concerning the use of latex rubber tubing it was discovered that one particular brand of tubing could be autoclaved 25 to 50 times before discarding, while another deteriorated rapidly and had to be discarded after 15 identical autoclavings. Before these tests, a 3/16 x 1/16-inch latex tubing had been used on I.V. sets. After repeated sterilization it was necessary to fasten the tubing to the adapters with rubber bands to prevent the escaping of fluids. This was an added effort and cost additional man hours. Tests showed a 5/32 x 3/64-inch tubing fastened more securely with a saving of man hours plus a difference of from four cents per foot to 3.5 cents per foot in original cost.

PLASTICWARE

At the American Hospital Association convention in Cleveland last September, Franklin D. Carr, administrator of the Waukesha (Wis.) Memorial Hospital, reported on actual use and future possibilities of plastic tableware. In this paper (published in HOSPITALS for December 1949), Mr. Carr pointed out the growing interest of hospitals in plastic tableware.

"In my hospital," Mr. Carr said, "we replaced one of the least expensive grades of china with the most expensive brand of plastic for all patient service. After one year of use we found that breakage (mostly cups) amounted to 8.1 per cent of the pieces or 8.5 per cent of the dollar value of our original investment in plasticware."

Mr. Carr told of another hospital, not included in the survey but having cost information available, which stated that it has been using plastic tableware in the nurses' dining room for the past four months with an average replacement cost of $5.48 per month. This compares with an average monthly cost of $129.30 for chinaware. In other words, the saving to date on this short-term usage has been 95 per cent. Although they do not expect to maintain this saving on a long-term basis, they are expecting something more than 50 per cent in savings.

The Purchasing department is edited by Leonard P. Goudy, purchasing specialist.

These figures indicate very definite research in the hospitals mentioned. Tests were made with conclusive results, thereby giving the hospital administrator or purchasing agent facts upon which he can rely.

Probably one of the most important research studies in the Johns Hopkins Hospital was conducted recently in regard to the possible elimination of double-thickness muslin wrappers used for sterile dressings and other sterile items. Quantities of unbleached muslin have been purchased by most hospitals for use in making up these muslin wrappers.

Tests were made concerning items sterilized in paper wrappers. It was discovered that through the use of a 30 or 40 pound kraft paper tubing, properly sealed, sterility could not be questioned. Through close cooperation with a leading paper manufacturer and fabricator, it was possible to standardize on several sizes of kraft tubing held together with a special steam and waterproof adhesive. The final result was pleasing from a time and labor standpoint, to say nothing of the tremendous savings involved through the use of this disposable kraft wrapper. For example, we previously used 2,200 double-thickness muslin wrappers, size 36 x 50 inches, per month. The cost of the material in each wrapper was 52 cents. By using an 11 inch disposable paper tubing, 20 inches long, it was necessary to use 3,666 feet per month, costing 2.5 mills per foot or four feet for one cent. The comparison in net totals was $1,144 for the muslin and only about $9.18 for the disposable paper tubing. This would indicate that each muslin wrapper would have to be used at least 125 times to equal the cost of the disposable paper tubing. This replacement was made for the sterilization of I.V. sets.

Another set contained two 12 x 12-inch and one 20 x 20-inch double-thickness muslin wrappers, of which we used 925 per month. The combined cost for each of these muslin sets was 16.8 cents. This was replaced by the use of 8-inch disposable paper tubing, 13 inches in length, giving a total usage of 1,002 feet per month, costing two mills per foot, or five feet for one cent. The comparison in net totals was $155.40 for the muslin and $2 for the disposable paper tubing. This replacement was made for the wrapping of donor sets.

Another set contained a 36 x 50-inch double-thickness muslin wrapper, of which we used 450 per month. The cost for this muslin set was 52 cents each. This was replaced by the use of 8-inch disposable paper tubing, 20 inches in length, giving a total usage of 750 feet per month and costing two mills per foot or five feet for one cent. The comparison in net totals shows $234 for the muslin and $1.50 for the disposable paper tubing. This replacement was made for the wrapping of recipient sets.

GLOVE WRAPPER

As a glove wrapper we used a pocket type folded muslin unit, 11 x 12 inches, of double-thickness. Usage was approximately 9,600 per month. Muslin material cost was 3.8 cents for each unit. This was replaced by 6-inch disposable paper tubing, 13 inches in length, giving a total usage of 10,400 feet per month, costing 1.5 mills per foot, or about 6.67 feet for one cent. The comparison in net totals shows $364.80 for the muslin and $15.60 for the disposable paper tubing.

Due to a new technique in the sterilization of hypodermic syringes we are using 3-inch paper tubing, 10 inches long, costing .85 mills per foot, or nearly 12 feet for one cent. Because of the huge

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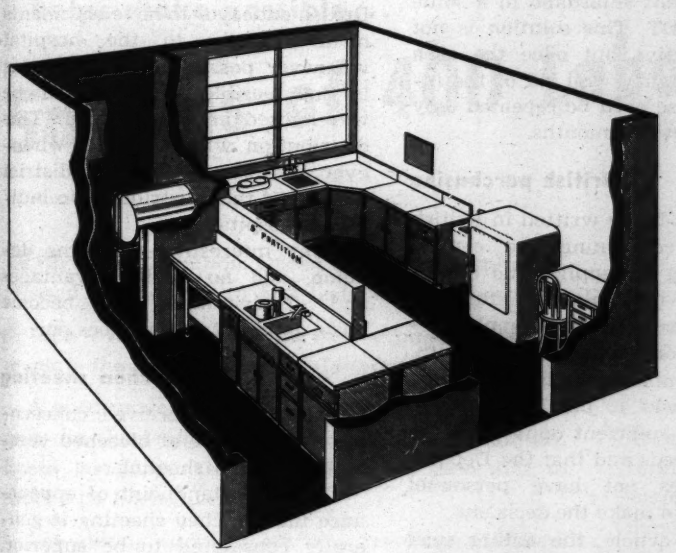

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2. 85L-D35—Table Top Units with 85X-27 Legs (3 Prs. Required)
3. 85L-72AS—Double Sink Unit
5. 85C-47—Counter Top Units with 85X-27 Legs (2 Prs. Required)
6. 85L2238M—Milk Formula Sterilizer
9. 85L-24AS—Sink Unit with Stainless Steel Grill
10. 85L-39—Corner Unit
11. Bulletin Board
12. 85L-35—Cupboard Unit
13. 85L-24D—Drawer-Cupboard Unit
14. Lavatory
18. 85ES-2—Electrical Duplex Plug Strip

GROUP 2 (NOT FIXED)

4. Olson Bottle Washer
7. 85P6398AL—Waste Receptacle-Silver lustre Finish
8. 85P5363—Double Element Hot Plate
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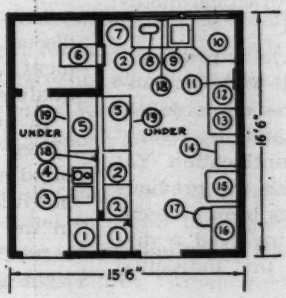

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quantity of syringes sterilized, we have not established figures concerning the total usage but we realize the savings will be comparable. These figures do not include the cost of labor in the manufacture of the muslin wrappers, mending or the laundry costs.

It should be borne in mind that an attempt was made to determine the average life of the muslin wrapper, and it is difficult to arrive at an unquestionable figure.

We know definitely that the labor involved in producing the muslin wrappers is much greater than that involved in processing the tubing in the procedure standardized. The change to paper tubing involved little change in our technique, and the savings are quite apparent.*

For many years hospitals throughout the country have been plagued with a problem involving the need for a special suture silk sterilizing spool or reel to satisfactorily sterilize small lengths of suture silk used in the general operating rooms. The only manufactured items available have been metal or glass suture silk spools or reels. Some hospitals have been using impregnated fiber reels and wood spools, and in some cases they have resorted to the use of cut lengths of rubber tubing. Through research, a plastic reel or spool has been developed. This reel or spool eventually may replace all of the formerly used less practical methods of sterilization.

The plastic material is practically unbreakable, will withstand autoclave temperatures up to 480°F. for 30 minutes, and is clearly marked for silk identification. Yet it will cost less than the previous items used. This has been a recent development that involved a distinct problem to the individual hospital.

These are but some of the things we have discovered, or which were initiated, by research. Research in the purchasing field continues to be intriguing for the purchasing agent who is interested in a better product for a given job or in savings to his institution.

*Since this paper was prepared, a modification of the basic paper tubing sterilization method has been made. It is felt that within a short time it will be available through a national distributor.

PURCHASING COMMENT

Insecticides

SOME INSTITUTIONS are being advised by salesmen to use one of the quaternary ammonium compounds for eradication of cockroaches. These compounds are perfectly satisfactory when used for the purpose for which they are intended, as an antiseptic solution or for sterilization of instruments or utensils. They are valueless, however, when used as insecticides.

According to work done at Michigan State College, the most effective spray for killing cockroaches is 2 per cent chlordane in a solution of DDT. This solution is not only effective but once the area has been fairly well rid of the insects its use need be repeated only once in several months.

British purchasing

Much is being written in British journals concerning the central purchasing of supplies and equipment for hospitals. The function is performed by the Supply Department of the Ministry of Health.

Two common complaints by hospitals appear to be that they are not given sufficient opportunity to discuss needs and that the Department does not have personnel qualified to make the decisions.

In one article, the author said, "There may be occasions when the blind must perforce lead the blind, but it surely is a new development in the administration of a public service when the blind lead the sighted."

The Supply Department has as its goals centralized purchasing wherever it appears to be economically or otherwise advantageous or necessary, and also standardization and simplification.

Centralized purchasing already includes x-ray equipment and supplies, laboratory equipment and glassware, some pharmaceuticals and chemicals, orthopedic appliances and spectacles.

It is proposed now to extend the service to include rubber goods, cotton textiles, woolen goods and cleaning supplies. Many additional items are on the list for future attention, but it is interesting to note that the department never expects to supply more than about 33 per cent of the total needs. Food is one of the supplies that they do not expect to include eventually in the plan.

Unlike group purchasing plans being operated in the United States, the Ministry of Health intends to warehouse to a certain extent. The British endeavor to have shipments made directly to the hospital whenever possible, but when this is not feasible supplies will be warehoused and distributed. This distribution will be made, whenever possible, to central district stores and then distributed to individual hospitals.

Many interesting problems develop, and no doubt advantages and disadvantages will become more apparent as time goes on.

Unbleached sheeting

Inquiries are received concerning the purchase of bleached versus unbleached sheeting.

From the standpoint of appearance the bleached sheeting is generally considered to be superior, but it must be remembered that the bleaching process results in loss of tensile strength.

Some tests have shown that complete bleaching of the sheeting results in loss of tensile strength equivalent to that lost in 30 launderings. This, then, must be taken into consideration, since it could be the equal of approximately 10 per cent of the original strength.

The recently adopted Standards for Sheets and Sheeting refer to bleached material. With the exception of tensile strength, the standard, of course, can be used when purchasing unbleached sheeting.—L.P.G.

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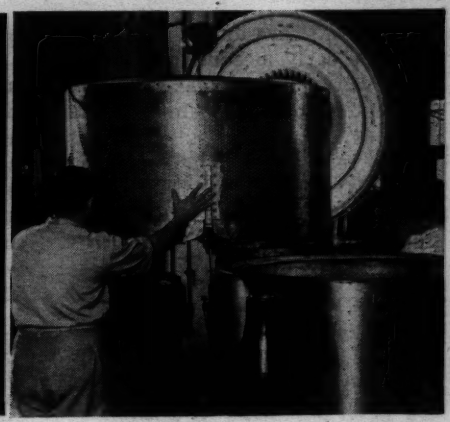

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Current price trends

As BUSINESS resumed a slower pace early in January, economists were able to make routine predictions for 1950. Almost none were as pessimistic as they had been a year earlier, but many approached the wholesale price picture cautiously. Dollar value continued to inch upward and prices still were fluctuating.

A rise in coal prices was predicted and a dip in the wholesale price of fuel oil seemed in the offing. In general, lower prices on most wholesale commodities were expected and had been predicted as early as November 1949, when the comprehensive monthly wholesale price index declined 0.4 per cent to 151.6 per cent of the 1926 average. The November index, then, was 7.6 per cent below the level of November 1948. It was 10.7 per cent below the postwar peak and 34.3 per cent above the level of June 1946.

Seasonal increases brought minor changes in the index for December. Grain, livestock, metals and metal products and coffee all experienced a year-end surge with a promise that 1950 probably will see a price pattern similar to that of 1949.

A farm survey from the Department of Agriculture indicated that the 1950 supplies of pork may set a new peacetime record. The survey showed that the price of milk is due to decrease slightly and that the government's price support program will try to keep the national farm price of eggs from falling below 37 cents.

In late December and early January, dressed beef prices decreased a total of $3—to $48 per hundred pounds; lamb prices dipped to $47 per 100 pounds and pork dropped more than $1 per 100 pounds in one week. Prices of a nationally advertised canned corn were reduced 7 per cent and a major California packer said he would soon announce an important reduction in his peach prices.

Hospital purchasers watched the prices of some sheets increase as much as 2 to 3 per cent at year's end at all of the nation's leading mills. Optimistic cotton-crop estimates, however, seemed to promise at least mild relief during the coming year. Meanwhile, all hard twist plied combed cotton yarns advanced slightly.

Early in December, the Department of Agriculture ordered a cutback of 1950 cotton planting to a total of 21 million acres. While the allotments are intended to achieve an over-all reduction of 20 per cent in national cotton plantings, some states were cut back more than 20 per cent. At about the same time, the department also announced a sharp reduction in peanut acreage for this year. The cut will bring the acreage down to the minimum provided by the new law—2,100,000 acres.

Fortunately, purchasers found early 1950 price increases mild and understandable. A few significant decreases in wholesale prices made for confidence on commodity markets, and no one anticipated a drastic change for any single type of commodity. Early in December—shortly before prices were expected to reach their seasonal high—a decline of 15 cents brought the price of sugar down to $5.70 per 100 pounds, the lowest since the end of April 1949. Other hopeful signs came as building materials and chemical prices showed evidence of leveling and the price of tin sank to 84 cents a pound.

TABLE 1—STEADY LEVELS

Weekly Index Numbers of Wholesale Prices—1926=100

COMMODITY	Dec. 21, 1948	Dec. 28 1948	Nov. 29 1949	Dec. 6 1949	Dec. 13 1949	Dec. 20 1949	Dec. 27 1949	% of Change 12-21-48 to 12-27-49	% of Change 1-4-49 to 12-27-49
All commodities	162.0	162.0	151.4	151.0	151.1	151.1	151.1	— 6.7	— 6.3
Farm products	177.5	178.0	155.3	154.0	154.2	155.0	155.1	—12.6	—11.6
All foods	170.4	170.3	157.9	156.6	156.5	155.6	155.6	— 8.7	— 7.4
Textile products	146.8	146.5	137.6	137.5	137.4	137.5	137.5	— 6.3	— 5.2
Fuel and lighting materials	137.0	137.0	130.4	130.3	130.4	130.4	130.5	— 4.7	— 4.8
Metal and metal products	174.0	174.0	169.2	168.9	168.7	169.6	169.4	— 3.2	— 3.3
Building materials	202.2	201.3	189.2	189.6	189.8	190.3	190.8	— 5.6	— 3.9

This weekly wholesale price index is designed as a weekly counterpart of the monthly wholesale price index. It is based on a sample of about one-eighth of the commodities in the comprehensive sample and therefore should be regarded as an indicator of price trends rather than as a final compilation. The monthly index should be used for fuller coverage.

Source: Bureau of Labor Statistics.

TABLE 2—HIGHER DOLLAR VALUE

Monthly Index Numbers of Wholesale Prices—1926=100

COMMODITY	Nov. 1939	Nov. 1941	Nov. 1943	Nov. 1945	Nov. 1947	Nov. 1948	Oct. 1949	Nov. 1949
All commodities	79.2	92.5	102.9	106.8	159.6	164.0	152.2	151.6
Farm products	67.3	90.6	121.4	131.1	187.9	180.8	159.6	156.8
Foods	72.3	89.3	105.8	107.9	177.9	174.3	159.6	158.9
Textile products	76.4	91.1	97.7	101.1	145.2	147.4	138.0	138.0
Cotton goods	74.8	105.4	112.9	125.1	203.9	191.2	176.5	178.1
Fuel and lighting materials	74.1	78.8	81.2	84.6	118.2	137.6	130.5	130.0
Anthracite coal	76.1	85.3	90.6	102.2	123.4	136.4	139.1	139.3
Bituminous coal	98.1	108.2	116.6	124.8	173.7	195.1	191.2	192.4
Electricity	76.5	68.2	58.3	68.0	66.3	67.3	*	*
Gas	82.2	77.5	77.0	79.1	83.6	92.6	87.8	*
Building materials	93.0	107.5	113.1	118.7	187.7	203.1	189.2	189.5
Brick and tile	91.6	96.6	100.0	116.7	148.1	160.4	161.8	161.7
Cement	91.3	93.1	93.6	100.1	120.6	133.6	134.5	134.5
Lumber	100.1	128.7	147.9	155.5	296.0	311.2	281.9	283.4
Paint and paint materials	84.9	95.3	103.2	107.7	161.8	161.4	141.1	139.9
Plumbing and heating materials	79.3	87.9	91.8	95.0	136.1	157.3	154.6	154.6
Structural steel	107.3	107.3	107.3	107.3	143.0	178.8	178.8	178.8
Other building materials	92.9	103.2	102.2	105.4	152.6	175.6	168.1	168.6
Drugs and pharmaceutical materials	79.7	112.7	106.3	110.7	151.1	152.0	123.1	123.0
Raw materials	72.4	90.2	111.3	118.9	175.5	175.2	160.3	160.4
Semi-manufactured articles	82.1	89.7	92.9	96.9	154.9	161.0	145.3	145.1
Manufactured products	82.0	93.8	100.2	102.2	152.4	158.8	149.1	148.1
Purchasing power of dollar	$1.262	$1.081	$ .971	$ .936	$ .626	$ .609	$ .657	$ .659

**Figures not available at press time.*

Source: Bureau of Labor Statistics.

Maintenance does not stop at the hospital kitchen door

THOMAS C. THOMPSON

ENGROSSED, AS THEY ARE, in other duties, engineers and maintenance workers can easily forget that they have responsibility for maintaining dietary equipment in the hospital. The role of the cook in the maintenance of equipment is essentially one of vigilance. It is up to the maintenance department to see that everything is in working order in the kitchen and food service department.

It would be interesting to know the number of times the cook or the raw materials were condemned for poor results, when in truth the equipment was at fault. And poor food is only one result of inadequately maintained equipment. The other result is waste—waste of food, of time, of money, and often of equipment itself.

In many smaller institutions, cooks often are called upon to service their own equipment. The cook, however, is interested primarily in cooking, and if he is to spend his time at maintenance work he does not belong in the dietary department.

Kitchen equipment may be classified in three general groups:

I. *Food storage and preparation.* (A) Refrigeration (walk-in boxes, deep-freeze boxes, reach-in boxes); (B) preparation (slicers, cutters, grinders, saws, peelers, choppers, mixers, juicers).

II. *Cooking.* (A) Ranges, broilers, frytops, stock kettles, pressure cookers, urns, toasters, deep fat fryers, waffle irons; (B) bake ovens, proofers.

III. *Serving.* Bulk food carts, heated tray carts, tray carts, steam tables, cold tables.

Mr. Thompson is assistant chief, Construction and Maintenance Branch, Division of Administrative Management, Public Health Service, Washington, D. C. Adapted from a paper presented at the Refresher Course for Cooks, sponsored by the District of Columbia Dietetic Association, Washington, November 1949.

REFRIGERATION

Obviously there are few maintenance activities involving the dry or subsistence storage. There is considerable preventive maintenance, however, in connection with refrigeration equipment, walk-in boxes, deep freezers and reach-in boxes. The dietary department can do very little about the maintenance of refrigerators.

Frost on coils of refrigerators should not accumulate more than one quarter of an inch before defrosting. Allowing excessive frost to accumulate on the refrigerator coils is not conducive to efficient operation. Temperatures become difficult to maintain. The spoilage of food increases; the length of time to defrost is greatly increased with a resulting increase in moisture on the floor of the refrigerator.

Improper sealing of refrigerator doors—a maintenance department responsibility—is a major cause of excessive frost. If a routine system of defrosting the coils in meat boxes, vegetable coolers and leftover boxes can be arranged between the maintenance and dietary departments, a minimum of maintenance of the mechanical unit will be necessary.

PREPARATION EQUIPMENT

The raw food preparation group can be a source of mechanical troubles. A smooth disc on a potato peeler slows down vegetable preparation. Dull blades on the food chopper or meat saw also cause delay. Grinders, slicers, mixers and cutters all can give trouble and hence retard food preparation. Delay is not the only effect of these minor faults. The poor appearance of a finished product often is traceable to dull cutters, saw blades, slicers or grinders.

The failure to maintain proper cutting edges on mechanical cutters or knives presents a serious safety hazard. Dull chopper blades cause added stress on the moving parts and increase the time necessary to complete the operation. This in turn adds to the maintenance cost of the equipment and increases operating costs.

A noisy mixing bowl usually indicates that it has a worn bearing or a loose spindle. If this condition is allowed to exist, the bowl becomes worn, perhaps entirely through in spots. The beater also may deteriorate, with a resulting increase in wear on bearings and sleeves of the machine itself. The very nature of this type of mechanical trouble is responsible for an increased length of time used for each operation, thereby bringing up total operating costs and causing the equipment to wear out faster.

RANGES AND OVENS

Ranges, frytops, broilers, deep fat fryers, pressure cookers, stock kettles, urns, toasters, waffle irons, bake ovens and proofers comprise the major portion of the heavy equipment in the dietary department.

Thermostats on ranges should be cleaned and calibrated or checked at regular intervals. The length of these intervals should be determined jointly by the maintenance engineer and the kitchen supervisor.

Cleaning of gas burners is neglected in most hospital kitchens. It will pay dividends, both from the standpoint of lower cooking time and lower maintenance costs, to set up a definite schedule for this operation. It is good practice to have the adjustment of gas burners checked periodically by a representative of the local utility company. This is best done through the maintenance engineer, so that all gas equipment in the hospital

may be checked at the same time.

Cracked or warped stove tops constitute a maintenance problem that does not receive the prompt attention that it should. The waste of fuel and the increase in cooking time from this cause is adequate justification for their replacement.

KETTLES AND STEAM TRAPS

Stock kettles and pressure cookers may be neglected for long periods and still function. However, the length of the cooking process and the appearance of the finished product will be affected by the mechanical fitness of this equipment. Steam traps may be blowing through. The steam pressure may be low, or the steam traps may not be functioning at all.

If the stock kettle steam traps do not function properly, condensate may accumulate faster than it is carried away. This will result in uneven temperatures causing some food particles to be overcooked while others remain uncooked. The cleaning of faucets and draw-off lines is a daily routine. This can be a problem if the faucets and draw-off lines are not designed for easy removal.

DEEP FAT FRYERS

Deep fat fryers are the cause of constant trouble when they are not properly cleaned or serviced. This, perhaps, is the most unwanted job in the kitchen area. Because of the lack of moving parts and the relatively inconspicuous appearance of this piece of equipment, there is a tendency not only to neglect it but to ignore it. Keeping these fryers in a clean and sweet condition at all times comes only through routine cleaning, servicing and checking of the thermostatic controls and the temperatures produced.

PRESSURE COOKERS

Pressure cookers are another source of trouble when not given routine attention. The drains in the compartments may become plugged, the traps may fail to function, the gaskets may leak and the pressure may be inadequate or the vent valves or vacuum breakers may fail to function. Individual traps are necessary for a good operation of pressure cookers. It is well to check the steam pressure.

The Engineering and Maintenance department is edited by Roy Hudenburg, secretary of the Council on Hospital Planning and Plant Operation.

A pressure of six pounds is adequate for this service. No advantage is to be gained by using higher pressures but damage to food can result. Leaky gaskets often are caused by improperly closed doors. Sagging doors will result, invariably, in a leaky gasket.

TOASTERS

Probably no piece of equipment receives less attention than the inconspicuous toaster. Servicing of the toaster is a mechanical procedure, which the maintenance department should perform regularly. Conveyors on the toaster can give as much trouble as any other part. One side of the conveyor chain may jump a sprocket, causing the baskets to misalign. This misalignment would cause a major repair job if it were to become jammed while making a flight. It might even break a chain. Baskets are relatively inexpensive. If they are bent or warped they should be replaced immediately by new parts. The conveyor chain is only one of two chains used in the modern toaster. The other is a drive chain. About all that can happen to the drive chain is to become loose or worn, or the sprockets could become worn so the chain slips and jumps.

The motor needs attention at frequent periods because of its subjection to high temperatures. The thermostatic control, while not readily accessible, should be taken out and cleaned periodically.

Bake ovens and proof boxes are relatively simple types of mechanism, but they also need some attention at periodic intervals if they are to operate without difficulty. The controlling mechanism on this type of equipment is important and should be so serviced.

SERVING EQUIPMENT

In the immediate area it is necessary to have some method of holding food until such time as it can be placed into the serving trucks, whether they be of the bulk type or the tray type. A modern hot table or steam table usually is equipped with thermostatic control to regulate the temperature to whatever setting the cook decides is necessary. Most steam tables are for maintaining heat in the food that is already prepared rather than to add heat. The thermostatic units of steam tables must be serviced regularly.

In conjunction with the steam table in the cafeteria counter is a cold table for salads, certain fruits, desserts, milk and other beverages that might need refrigeration. The mechanism of this refrigeration unit usually is placed in an inconspicuous location and is likely to be forgotten. It should have the same routine care and maintenance afforded to regular kitchen refrigeration units.

Bulk food carts or tray carts often are used in serving bed patients. The thermostatic elements of heated food carts are a source of trouble.

DISHWASHING MACHINES

Today dishwashing machines are so constructed that, unless the human element enters the picture, very little major trouble can occur. The human element does enter the picture, however, and many times untrained or unthinking operators will take the strainer out of the wash water tank and dump the garbage down into the pump.

Pieces of silver, such as forks, knives and spoons, have been found in the impellers of the circulating pump. The removal of this silver is a major repair job. In some cases, in fact, it is impossible and new castings must be purchased for the pump.

The thermostatic controls, mixing valves, traps, pumps and driving mechanism, conveyor and nozzle all are sources of potential maintenance trouble. Thermostatic elements should be regularly inspected, cleaned and adjusted. The mixing valves should be examined periodically and the conveyor chain should be inspected for weak links. A good routine system for cleaning nozzles should be performed after each day's run.

Many kitchens have their own elevators to the serving area. The

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failure of the elevator to level properly may cause trays to be misarranged and may damage the casters, wheels or bearings of the food carts. Frequent inspections and adjustments of elevator controls and cables are necessary to assure their proper operation. Cooks have a right to expect their transportation facilities to be in good working order. Many kitchens are equipped with dumbwaiters of ancient vintage. These can be a source of annoyance not only from their operational features but also from their lack of safety features. It is possible, with many dumbwaiters, for trays to become lodged in the shaft if not properly placed upon the lift. In modern dumbwaiters, this fault has been corrected on the drafting table. This does not eliminate the necessity for routine inspection and adjustment of the controls and checking of the cables.

The physical layout of the plant often determines the type of equipment and the methods of service to be used. It is with this thought in mind that equipment and transportation are selected. If equipment is not located in a functional area, it not only fails to perform its function efficiently but it also increases the cost of maintenance. It is necessary to consider these points in selecting equipment, and it is advisable that the maintenance department help in determining functional or utility value of specialized equipment. Many times a replacement may be indicated when in reality it is the type and make of equipment that is faulty. All equipment does not perform like duties in the same efficient manner. All, however, require a definite routine of maintenance.

If all indications of mechanical or electrical difficulty were reported promptly and intelligently to the engineering and maintenance department, and if maintenance workers would consider the kitchen as an important part of their responsibility, fewer delays and better food would result. Hospitals then would be well on their way toward real cooperation between the dietary and mechanical departments in their maintenance programs.

ENGINEERING and MAINTENANCE COMMENT

Operating room lights

THE NEW explosion-proof portable operating room lights shown at the Cleveland convention are built with reflectors exposed to the atmosphere without any cover glass.

This reduces the cost of manufacture because only the glass enclosure of the electrical lamp and the housing of the socket need to be explosion-proof. If there were a cover glass outside it would have to be strong enough to resist a possible explosion.

The practical question that came to mind when the open aluminum reflector was seen was: "How soon is that reflector going to become dull and lose its reflecting value?"

This question seemed particularly pertinent since the reflectors are made of aluminum, which becomes dull when it oxidizes. Naturally, the designers had anticipated this difficulty, and rather interestingly, by coating the aluminum with a crystalline kind of aluminum oxide which has a permanent gloss, they have come up with a surface that apparently is harder than glass.

Fire safety book

A new publication that should be given a place in the engineer's own library is "Hospital Fire Safety—1949." This volume is reviewed in the literature section of this issue of HOSPITALS.

Oxygen safety

Administrators and engineers considering installation of oxygen piping systems, who may have seen a detailed story on the New York Fire Department's objections to the new installation at the Presbyterian-Columbia Medical Center, now can proceed with their plans without undue concern.

The newspaper article tended to exaggerate a situation in which the fire department withheld approval until it could be given certain engineering information with respect to the design of the piping system. Safety controls as originally planned were entirely acceptable to the department, and only a minor modification that had to do with the accessibility of emergency valves was required.

As a matter of fact, it could be demonstrated readily that the oxygen piping system is safer than the the use of tanks throughout the hospital. At the low pressure used throughout the system within the building there will be less than one and one half cylinders of oxygen in the piping system at any one time. This really is not much of a talking point, however, because diffusion of oxygen in the atmosphere is so rapid that it offers a substantial fire hazard only when confined within an enclosed space, such as an oxygen tent. Of course, there are hazards entailed in the use of oxygen in the presence of oils and grease, but the gas manufacturers have given such wide publicity to these hazards and the steps to be taken to prevent them that this is hardly a major consideration now.

The system at Presbyterian eventually will provide 600 oxygen outlets, of which 330 are now in operation. The system connects to a trailer station outside of the hospital. Two of the trailers will be connected to the system at all times, one in actual use, the other, reserved to be automatically cut in when the supply of the first is exhausted.

Engineers' institute

Safety in the maintenance department, as well as education in the maintenance department, will be among the new topics introduced at the Institute for Hospital Engineers, announcements of which will be in the mail shortly. The dates for the institute are April 24-28. The place is the Sheraton Hotel, St. Louis.—R.H.

Introducing the *New* Ohio Heidbrink 90 Iceless Tent . .

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Unnoticed by the patient, the new Ohio Heidbrink 90 Tent gently diffuses cool, constantly controlled, oxygen-rich air into the hood. Though outside thermometers may read 40° higher, the air inside the hood is kept within *one degree* of the temperature selected. The roomy vinylite hood provides a clear, unobstructed view on all sides and above, thus puts the patient at ease.

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Applying the Master Menu to the hospital's own problems

ENSIO K. F. RONKA, M.D.

A SIMPLE MODIFICATION of the Master Menu at the 275-bed Quincy City Hospital has enabled us to adapt this service to our own particular needs and has established our food planning on an economical and a therapeutically sound basis.

The modification consists of attaching a census sheet for wards to the Master Menu charts on our dietary department bulletin board. In this way, the department has a centrally located menu with all the pertinent information on it. This has eliminated the use of individual menus and census slips and makes it a great deal easier for a dietary supervisor to check the food trucks as they leave the kitchen.

The Master Menus that appear each month in HOSPITALS are typed on the regular transfer slips. These menus include the house, soft and liquid diets and the selected items of food ordered for the private patients. To that slip is attached the census sheet, which lists the names of the wards, devoting a column to each. Also included are columns for the special food trucks and the staff dining room. Then these slips are attached to the Master Menu cards, as shown in the accompanying photographs.

We have student nurses who write, prepare and serve special diets, so we do not find it necessary to record special diets on the charts. The column marked "Special" is used by these nurses to record the amount of items they may need for their diets.

TOTAL AT A GLANCE

The last column is used for totals. This helps the cooks to know quickly and exactly how much of each food item they must prepare. The private menu count is added to each individual ward column, and then the census is filled in for the house, soft and liquid diets of the other wards.

The therapeutic dietitian furnishes her count for the special food truck, and the daily census is filled in for the staff dining room. The cooks thus can place on the

Dr. Ronka is director, Quincy City Hospital, Quincy, Mass.

The American Hospital Association's

MASTER MENU

For Simplified Menu and Diet Planning

DINNER

MASTER MENU	DAY'S MENU	1	2	3	4	5	6	7	8
*Soup or Appetizer 7		X	X (strained)	X (strained)	X	X	X	X	X
Crackers 8		X	X		X	X	X		
Meat, Poultry, or Fish 9		X				X			
Meat, Poultry, or Fish 10			X		X (ground)		X	X	X
Potatoes 11		X				X			
Potatoes or Alternate 12			X		X		X	X (mashed)	X
Vegetable 13		X			X	X		X	X
Vegetable 14			X		X		X	X	X
*Salad 15		X				X			
Salad Dressing 16		X				X			
Dessert 17		X				X			
Dessert 18			X						
Gelatin or Dessert 19				X	X		X		
Fruit 20								X	X
Fruit Juice 21				X		X			
Bread or Toast		X	X		X (1 slice)	X	X	X (1) slice)	X
Butter or Margarine		X	X		X	X	X (2 squares)	X (2 squares)	X
Milk (1 glass)		X	X	X (skim milk)	X (1 glass)	X	X	X	X
Beverage (optional)		X		X	X	X	X	X	X
Cream (for beverage)		X		X	X	X			X
Sugar (for beverage)		X		X	X	X	X		

*To reduce costs, omit soup and salad at dinner on the general diet.

HOSPITALS

THE ORIGINAL Master Menu card has columns for one general diet and seven special diets, keyed to the monthly menus in HOSPITALS.

MASTER MENU

For Simplified Menu and Diet Planning

DINNER

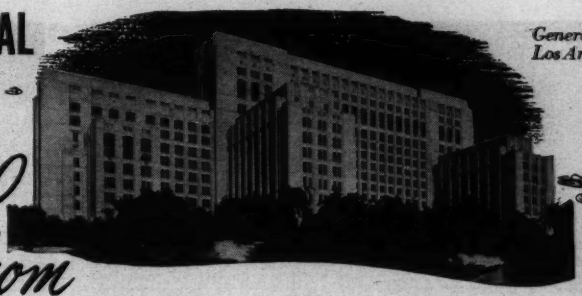
DINNER MENU	Day: MONDAY Date: NOV. 7	S 1	S 2	S 3	S 4	S 5	S 6	S 7	SPECIAL	TOTAL
*Soup or Appetizer	7 TURKEY SOUP	4	3	3	4		4			275
Crackers	8 CRACKERS									275
Meat, Poultry, or Fish	9 BRAISED BEEF	30	25	27	24	25	20	15	10	
Meat, Poultry, or Fish	10 GRILLED FRANKFURTS									275
Potatoes	11 PARSLIED POTATO	30	25	27	24	25	20	15	10	
Potatoes or Alternate	12 POTATO SALAD									275
Vegetable	13 BROCCOLI CHEESE SAUCE	30	25	27	24	25	20	15	10	
Vegetable	14 FUSSED VEGETABLE									
*Salad	15 SLICED EGG SALAD									275
Salad Dressing	16 RUSSIAN DRESSING									275
Dessert	17 BUTTERSCOTCH PUDDING	30	25	27	24	25	20	15	10	
Dessert	18 COOKIES									275
Gelatin or Dessert	19 JELLO OR CUSTARD	3	3	4	4	3	4	1	1	
Fruit	20 PRUNE PLUMS								6	275
Fruit Juice	21									
Bread or Toast	Bread or Toast									
Butter or Margarine	Butter or Margarine									
Milk (1 glass)	Milk (1 glass)									
Beverage (optional)	Beverage (optional)									
Cream (for beverage)	Cream (for beverage)									
Sugar (for beverage)	Sugar (for beverage)									

*To reduce costs, omit soup and salad at dinner on the general diet.

HOSPITALS

AS REVISED at Quincy City Hospital, the Master Menu card now includes a census chart for a quick picture of needed quantity.

LOS ANGELES GENERAL HOSPITAL



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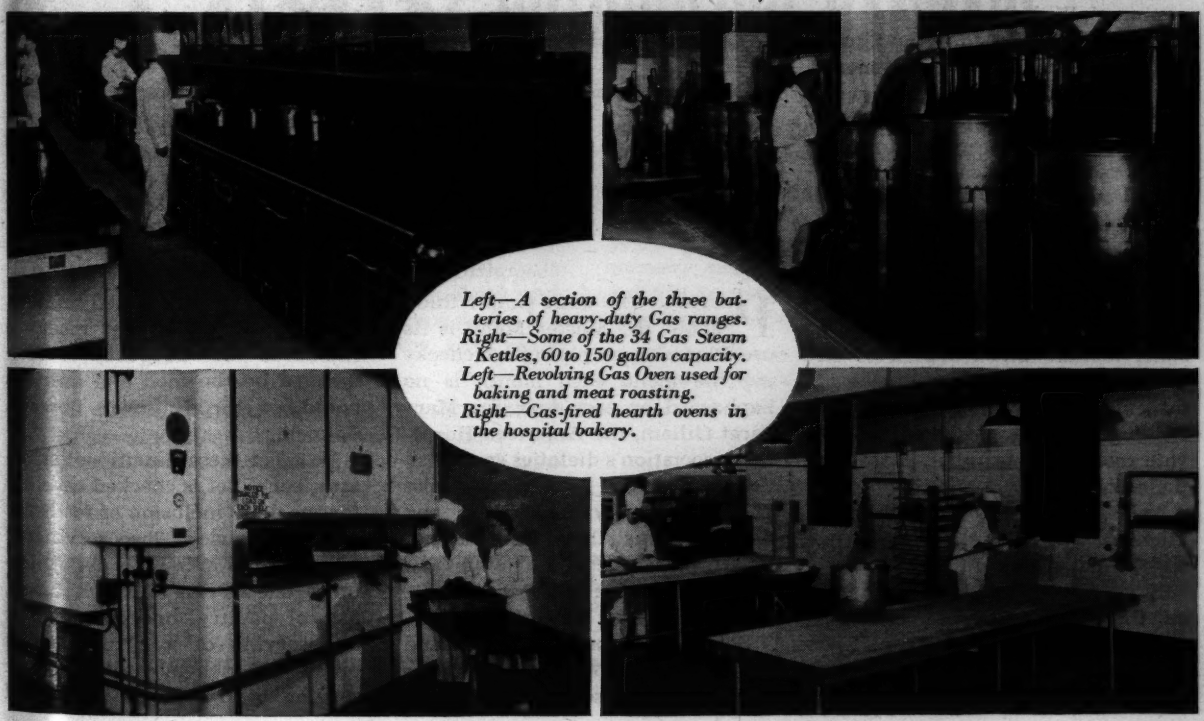
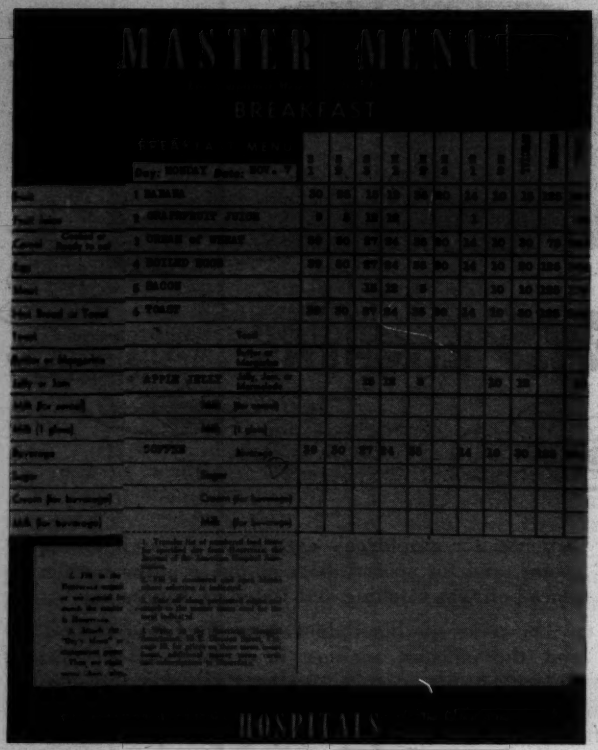
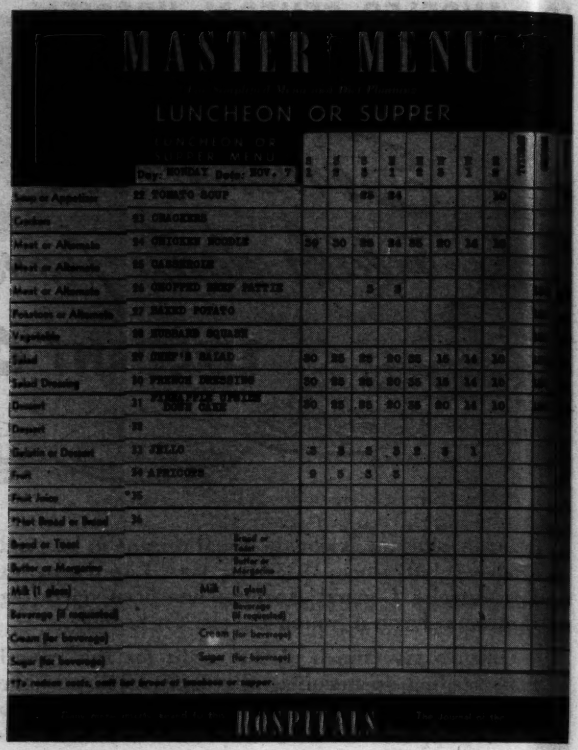


Left—A section of the three batteries of heavy-duty Gas ranges.
Right—Some of the 34 Gas Steam Kettles, 60 to 150 gallon capacity.
Left—Revolving Gas Oven used for baking and meat roasting.
Right—Gas-fired hearth ovens in the hospital bakery.



THE SIMPLE ADAPTATION of the Master Menu, as shown in these photographs, has brought about savings in time, work and money.



A HOSPITAL that prefers a census chart to the columns for general and special diets can adapt the Master Menu readily.

food trucks the count furnished to them for each ward.

Any substitutions of our own are included on the menu, but substitutions are kept to a workable minimum. With these charts on the central bulletin board in the kitchen, they are consulted by the meat, vegetable and pastry cooks as well as by the dietary supervisor. Each food item to be prepared for the day is recorded for easy identification.

As part of their training, our student nurses write and prepare special diets, and they find the Master Menu very helpful. They consult it often and, whenever possible, include the house items on the special diets so that they can dispense with any unnecessary cooking. This enables them to devote more time to other phases of their dietary experience.

This hospital has a large main kitchen, where food is prepared for the patients, staff and personnel. This means that the food for all these three services is being prepared at the same time. The Master Menu has proved extremely useful in easing this situation.

We are highly pleased with the Master Menu and now it is an integral part of our dietary department. It has been of great value in reducing to a practical minimum the number of diets. It has saved work and simplified planning. In the comparatively brief time that it has been in use, it is pointing the way to decreasing food costs and conserving time in food preparation.

The Master Menu is simple only in its application and use

PROBABLY THE ONLY simple thing about the Master Menu is its use. Planning, preparing and checking the menu each month is no haphazard or easy task for Margaret Gillam, the American Hospital Association's dietetics specialist.

For 40 hours each month Miss Gillam plans, writes, checks and double-checks the Master Menu before turning it in for publication in HOSPITALS. Here are some of the things that must be considered.

Selection of the general diet and additional foods for modifying this to take care of seven special diets requires a well-planned method. All but the liquid diet meet the standards of adequacy recommended by the food and nutrition board of the National Research Council.

To meet these nutritional standards, each diet is checked carefully for the daily inclusion of foods that assure adequacy: Two servings of meat, fish, poultry, cheese or legumes, one serving of which is meat, fish, or poultry; one pint of milk; one serving of a citrus fruit or other food rich in vitamin C; one serving of fruit; two servings of

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vegetables; one serving of potato; one egg; three servings of whole grain or enriched bread or cereals; three servings of butter or fortified margarine, plus additional foods to satisfy the appetite and energy requirements.

Each meal is planned carefully, not just for nutrition but also for flavor, variety, attractiveness and general acceptance by patients. Color is an important factor. Color combinations must harmonize, even in food. Shape is another consideration. Foods in each meal are planned in a variety of forms, not all flat or high or round but a pleasing combination of shapes. Consistency also is important, and here the accent is on variety. If some foods are served in a soft form, then a crisp food is included in the meal. Flavor, of course, gives zest to a meal, and this aspect receives special consideration.

The first step in planning the Master Menu is to prepare a chart of dinner meats for the month. This is insurance that the same meat, or meat in the same form, will not be served on the same day in any week during the month. The meats selected then are written on large lined worksheets, and vegetables are chosen to blend with the meat flavor and to give color to the meal.

On several diets, two vegetables are served at dinner. For this reason, vegetables are selected that look well together and, whenever possible, one vegetable is low in calories and the other is high. The dinner is planned to provide some color interest and to be satisfying even if, for economy reasons, the hospital omits the soup or appetizer and salad.

Production problems of the dietary department are given careful consideration in preparing the Master Menu. For example, to minimize food production a supper vegetable is selected that can be served with all diets. A salad is selected that can be used for the diabetic, low fat and low calory diet. A cream soup usually is

The Dietetics Administration department is edited by Margaret Gillam, dietetics specialist.

MARGARET GILLAM, the dietetics specialist of the American Hospital Association, plans each month's Master Menu on large sheets of paper, then checks and rechecks for accuracy. All this takes about 40 hours.

planned on the supper menu to increase the milk in the diet, particularly desirable for the soft and liquid diets.

After the menus are planned, the vegetables are charted for the month to check from week to week on variety and to prevent repetition on the same days in the week.

Menus are checked for the inclusion of vitamin C, either as citrus fruit or tomato juice at breakfast or a food rich in vitamin C at some other meal in the day. To plan one serving of fruit in each diet, in addition to the citrus fruit or juice, a fruit dessert is served at dinner or supper—unless a fruit salad is served on the diets at supper. Consideration is given to the amount of food production required of the cooks each day, and particularly to the work involved in baking and in preparing desserts.

After the menus are completed, each diet is checked for adequacy, color, consistency, flavor and attractiveness as a tray served to the patient. The menus are not planned for a selective food service, as it may be desirable, in the small hospital, to keep to a minimum the number of food items to be bought and prepared. The menus are adaptable for selective service by greater variety in the selection of the two dinner and supper meat items and an additional salad at these meals.

The menus are planned to keep each day's food outlay within a reasonable budget allowance.

These are but some of the considerations that go into planning the Master Menu each month. These considerations, this careful and scientific planning are the ingredients that give the Master Menu its unique value in hospital dietetics administration.

Master Menus for March

THE MARCH SERIES of the American Hospital Association's Master Menus* is printed below.

To use these menus, only three simple steps are required: First, read the daily selections for the general and seven special diets; second, type the day-by-day menu suggestions on transfer slips that are spaced and numbered to correspond with the Master Menu wall charts; third, attach the completed transfer slips on the spaces which have corresponding numbers on the breakfast, dinner and supper wall charts.

Additional blocks of perforated transfer slip pads and extra Master Menu kits may be purchased from the American Hospital Association, 18 E. Division Street, Chicago 10.

March 1

1. **Banana**
2. Apricot Nectar with Lime Juice
3. **Oatmeal or Puffed Wheat**
4. **Poached Egg**
5. Grilled Canadian Bacon
6. **Toast**

7. **Tomato Bouillon**
8. **Toasted Crackers**
9. **Oven Fried Flounder Fillets—Tartar Sauce**
10. Broiled Flounder
11. **Scalloped Potatoes**
12. Parslied Potatoes
13. **Pimiento Diced Celery**
14. Green Peas
15. **Cream Cole Slaw**
16. ———
17. **Apple Crisp, Whipped Cream**
18. Apple Sauce
19. Apple Whip
20. Unsweetened Apple Sauce
21. Pineapple Juice

22. **Cream of Spinach Soup**
23. **Melba Toast**
24. **Tuna Vegetable Pie with Pin-Wheel Cheese Biscuits Atop**
25. Creamed Tuna
26. Broiled Veal Steak
27. Baked Potatoes

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A system of cost analysis for the institutional laundry

FRITZ FIELD

WHAT SHOULD THE laundry cost per patient day be in a general hospital? Published costs show such a wide variance that it is obvious that there is no uniform cost system in use at the present in hospital laundries.

Some hospital laundries seem content with just enough production to cope with the demand and give little thought to any system to determine costs. Other hospitals impose an unnecessary burden on the laundry manager and require so much extraneous data, in addition to basic cost factors, that a clear picture of the operating costs is not present.

There undoubtedly exists a need for a simple system of cost analysis that can be used by all institutional laundries. Such a system should reflect all the important factors and should be set up so that cost comparisons may be made with other institutions. Further, it should be easily understandable and should require a minimum of clerical work by the laundry manager.

A system used for two years at Beth Israel Hospital in New York City has been found more than adequate to meet these requirements.

The backbone of any such program, of course, is an accurate record of the amount of linen passing through the laundry during a given period. In our laundry a platform scale installed between the soiled-linen room and the washroom is used to weigh all linen before it is loaded into the washwheels. Then the total weight of linen washed per day is recorded in our production book. This gives us the basic figure for our monthly report.

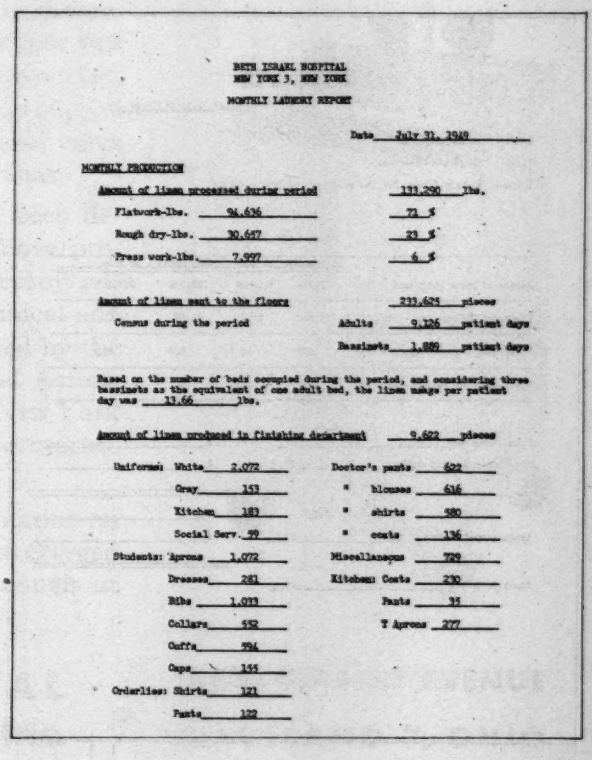
Linen is classified as flatwork, rough-dry work and presswork. At this institution an average of 71 per cent is flatwork, 23 per cent is rough-dry work and 6 per cent is presswork. The output under each classification is controlled by a comparison of production figures with the capacity of the machines.

A daily "allocation report" constitutes a record of the amount and type of linen sent to each floor. The total of these reports shows the total number of pieces processed. The production of the finishing department is counted and entered in the production book each week, thus giving an exact account of the output of each press unit. The forms shown in the illustrations are based on the above information and are filled out monthly.

These forms are sufficiently adaptable to be of use to any hospital, and the resultant figure offers an accurate index of the laundry cost per patient day.

Included in the analysis is a breakdown of all laundry costs. In determining these, the laundry manager has the cooperation of other department heads through prompt reports of all figures required for the monthly laundry report.

The admitting office reports the number of patient days (three bassinets are considered the equivalent of one adult bed); the accounting office reports the total amount of the payroll, and the engineering



BETH ISRAEL HOSPITAL
NEW YORK 3, NEW YORK

MONTHLY LAUNDRY REPORT

Date July 31, 1949

MONTHLY PRODUCTION

Amount of linen processed during period 131,290 lbs.

Flatwork-lbs. 94,636 71 %

Rough dry-lbs. 30,657 23 %

Press work-lbs. 7,997 6 %

Amount of linen sent to the floors 231,625 pieces

Census during the period Adults 9,126 patient days

Bassinets 1,899 patient days

Based on the number of beds occupied during the period, and considering three bassinets as the equivalent of one adult bed, the linen usage per patient day was 13.66 lbs.

Amount of linen produced in finishing department 9,622 pieces

Uniforms: White	2,072	Doctor's pants	622
Gray	153	" blouses	616
Kitchen	183	" shirts	980
Social Serv.	99	" coats	136
Students: Aprons	1,072	Miscellaneous	729
Dresses	281	Kitchen: Coats	230
Bibs	1,073	Pants	95
Collars	552	T Aprons	277
Cuffs	594		
Caps	155		
Orderlies: Shirts	121		
Pants	122		

MONTHLY PRODUCTION form shows detailed breakdown of linen processed. Pounds per patient day is computed by dividing total linen poundage by total patient days.

Mr. Field is laundry manager at Beth Israel Hospital, New York City.

BETH ISRAEL HOSPITAL
New York 3, New York

MONTHLY LAUNDRY REPORT

MONTHLY COST ANALYSIS

LABOR $ 1,446.93

WASHROOM SUPPLIES

	AMOUNT	UNIT COST	TOTAL
Soap	660 lbs.	$.1060	70.12
Alkali	795 lbs.	.791	62.92
Bleach	45 gals.	.30	13.50
Sour	150 lbs.	.2025	30.38
Starch	300 lbs.	.1277	38.99
Other Supplies			31.90
F.W.I. Covers			72. -
Press Covers			42.80

$ 336.61

STEAM FOR HEATING WATER	$ 177.60
STEAM FOR HEATING EQUIPMENT	$ 178.80
ELECTRICITY	$ 142.09
MAINTENANCE	$ 61.00
DEPRECIATION	$ 75.00
LINEN REPLACEMENTS	$ 1,327.26
Total	$ 5,761.29
AMOUNT OF LINEN PROCESSED DURING THE MONTH	133,290 lbs.
PROCESSING COST	$ 5,761.29

Processing Cost per lb. of linen $ .043

13.66 lbs. linen patient day $ .043 per lb. of linen

Total $ .59 per patient day.

L. Fiela
Laundry Manager

COST ANALYSIS form gives administrator and laundry manager opportunity to pin-point specific areas of high costs, thus facilitating efforts toward cost cutting.

BETH ISRAEL HOSPITAL
New York 3, New York

Date July 31, 1949

From: Laundry Manager

To: Executive Director

Subject: Monthly Report for the month of July 19 49

	This month	to date	This month	to date
Amount of linen processed - lbs.	133,290	911,839	126,524	857,045
Usage per Patient Day - lbs.	13.66	13.9	14.87	14.0
Processing cost per pound - del.	.043	.045	.048	.053
Total cost per patient day - del.	.59	.63	.71	.74

Linen Inventory _____ 19__ $ _____

New linen received during _____ 19__ $ _____

Total $ _____

Linen issued during _____ 19__ $ _____

Linen Inventory _____ 19__

LAUNDRY MANAGER'S report goes to hospital administrator at end of the month and shows a comparison of this month's processing costs with average costs for year.

department reports the consumption of electricity, steam and water, and the cost of repairs.

If individual meters are not installed, the amount of steam and water must be calculated. The amount of steam used may be determined simply by multiplying the steam consumption of the machines per hour by the total amount of work hours. The washing formula indicates the amount of hot water used for each load. Then, the total volume of water is easy to ascertain since the number of loads is indicated in the daily washroom report.

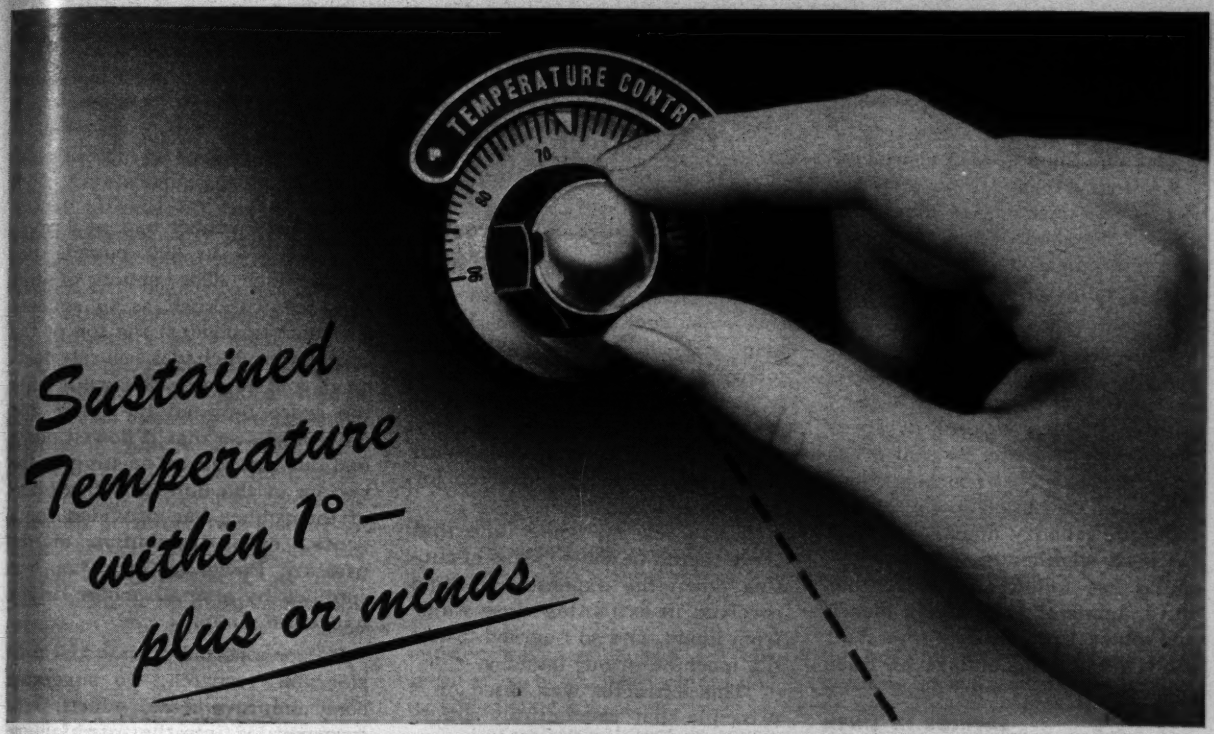
A perpetual inventory of new linen and washroom supplies shows the value of both at any time and the consumption during any desired period. Although the costs for linen replacements are not processing costs they are included because low processing costs often are presented only at the expense of high costs for linen replacements. Costs for linen replacements actually are one of the important indicators of efficiency in an institutional laundry.

Costs for depreciation of new machines are amortized over a period of 10 years.

The *laundry cost per pound of linen* is obtained by dividing the total monthly expense by the weight of linen processed during that period. This figure is multiplied by the amount of linen used per patient day to show the total *laundry cost per patient day* (see monthly cost analysis).

LONG-TERM BENEFITS

There are other advantages to such a system in addition to these cost figures. It offers the administrator and trustees a better understanding of the many factors which enter into a finished piece of linen. The procedure enables the administrator to evaluate the cost efficiency of the laundry. By using the breakdown of costs he can separate and analyze specific costs to determine whether they are justified, and to help him decide whether requests for new machinery have any foundation, whether more labor is required or where costs can be reduced. For example, when linen replacements are compared



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to the number of patient days, this all-important question is answered: Is there a need for increased linen control?

The simplified system also helps the laundry manager do a better job. It not only makes him more production-minded, but it creates in him an awareness of the hospital's administrative problems as well.

While the laundry crew is doing its routine work the laundry manager can gauge himself in a competitive manner against his previous costs and the costs of other institutions of comparable size. Through the breakdown of his costs the laundry manager is able to check whether given wash formulas are followed and whether the amounts of soap, alkali, bleach and other supplies are consistent with the total poundage of linen processed.

SAVINGS IN LINEN

The laundry manager charged with the costs of linen replacements learns to know the value of careful handling. He is interested in minimum wear and tear of each piece while it is laundered and will try to control the linen wherever it is.

He also can judge if labor costs are in proportion to total laundry costs and whether machines are utilized in accordance with their rated capacities. He can check the efficiency of a team of workers, like the flatwork crew, whose production does not depend on the output of a single operator.

Through such knowledge the laundry manager can achieve the position of an efficient administrator of his own department and can gain the respect of his superiors as well as the respect of workers in the laundry.

It would be of considerable value if other hospital administrators would agree to standardize their laundry accounting on this or some similar basis so that their laundry managers could make a true comparison of their costs to those of other institutions. Itemized laundry costs would then be much more meaningful than many of the monthly laundry reports now encountered.

LAUNDRY MANAGEMENT COMMENT

Hydraulic extractor

INFORMATION ON an interesting development is contained in this correspondence from Ritz E. Heerman, superintendent of the California Hospital, Los Angeles:

"About two years ago, the representative of a laundry machinery company came to our hospital with a new-type laundry extractor for us to examine.

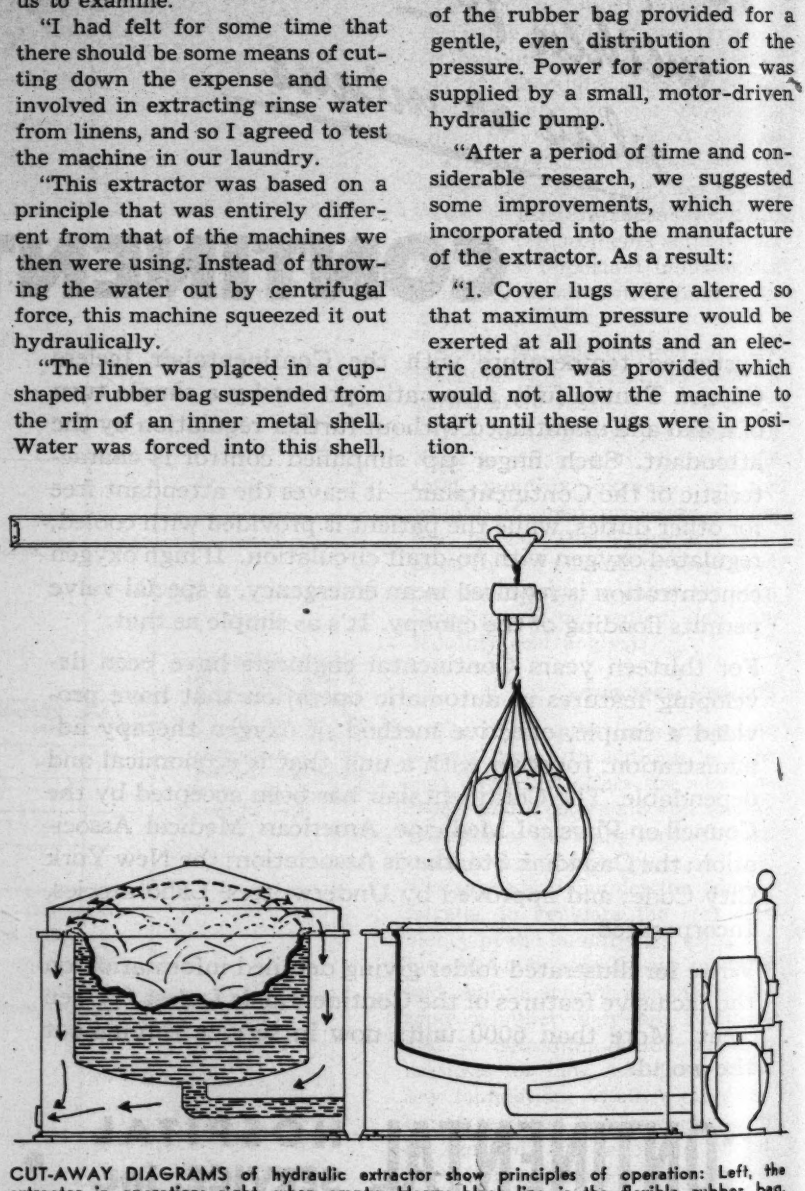
"I had felt for some time that there should be some means of cutting down the expense and time involved in extracting rinse water from linens, and so I agreed to test the machine in our laundry.

"This extractor was based on a principle that was entirely different from that of the machines we then were using. Instead of throwing the water out by centrifugal force, this machine squeezed it out hydraulically.

"The linen was placed in a cup-shaped rubber bag suspended from the rim of an inner metal shell. Water was forced into this shell, beneath the rubber bag, at a pressure of 275 to 300 pounds per square inch. The action of this pressure was such as to squeeze the linen up against the top of the container, which was securely fastened, and to force the water into the space between the inner and outer shells so that it flowed down and out through an opening at the bottom of the unit. The flexibility of the rubber bag provided for a gentle, even distribution of the pressure. Power for operation was supplied by a small, motor-driven hydraulic pump.

"After a period of time and considerable research, we suggested some improvements, which were incorporated into the manufacture of the extractor. As a result:

"1. Cover lugs were altered so that maximum pressure would be exerted at all points and an electric control was provided which would not allow the machine to start until these lugs were in position.



CUT-AWAY DIAGRAMS of hydraulic extractor show principles of operation: Left, the extractor in operation; right, when empty. Heavy black line is the flexible rubber bag.

"2. The arrangement of the rubber bag was changed so that linens would not creep into the seams of the cover lugs.

"3. Nylon slings were substituted for canvas slings.

"4. An electronic switch was installed to shut off the hydraulic pump automatically and to signal the operator when maximum extraction had been effected.

"5. Minor improvements in piping and pumps were made.

"Our experience with the present machine has been gratifying since it has afforded us substantial savings in time and money. The following features will illustrate:

"1. The new improved hydraulic extractor permits direct loading by slings, which are filled at the washer and conveyed by an overhead trolley to be dumped into the extractor. Unloading is accomplished by merely lifting out the slings.

"2. The hydraulic extractor will handle four and one-half times as much linen per hour as our 30-inch centrifugal extractor and at two-thirds the labor cost. This is because extraction time is only 10 minutes as compared to 20 minutes for the centrifugal extractor and because the hydraulic extractor can be loaded and unloaded faster.

"3. Wear and tear on linen is considerably lessened since the fabrics do not become twisted together and because no pulling or tugging is necessary in unloading.

"4. Cost of maintenance is 40 per cent less because of the minimum power needed and the absence of wear on the machines due to vibration.

"5. Capital investment is much less because only half as much floor space is required and the original cost of equipment is a great deal less.

"The statistical comparison in the accompanying table was prepared by our laundry foreman and the hospital engineer."

DR. MORRIS H. KREEGER (right) and hospital board members examine one of the new washers at formal opening of the new $500,000 Michael Reese Hospital laundry.

Michael Reese laundry

A building that probably is the latest word in hospital laundries was dedicated at the 718-bed Michael Reese Hospital in Chicago in December.

Dr. Morris Kreeger, director of the hospital, reports that the new building cost in the neighborhood of half a million dollars and that the funds were provided by the Jewish Federation of Chicago.

The structure measures 127 x 77 feet and consists of a basement, a main floor and a balcony. Almost all processing equipment is on the spacious main floor, where there is ample room for future expansion.

There is a competently engineered ventilation system with giant fans and motor-operated windows to keep circulating air at a comfortable temperature. Abundant light streams through large windows on the main floor, and a public address system has been set up to pipe music into every part of the building. A sealed room with a filtered air supply has been provided to keep stored linen clean.

Morris Friedman, recently-elected president of the Institutional Laundry Managers Association of Illinois, will supervise processing of the hospital's weekly laundry volume of 70,000 pounds.

Planning and design were in the hands of John T. Black, of the hospital planning staff, who was assisted in his work by the Laundry Technical Advisory Committee of the Jewish Federation.

An article by Dr. Kreeger, discussing details of planning that preceded construction of this laundry, will appear soon in HOSPITALS.

Centrifugal versus hydraulic

Number of Loads	*Total Pounds*	*Total Time*	*Extraction Time*	*Labor Time*	*Labor Cost*	*Power Cost*
30-inch Centrifugal Extractor						
1	65	25 min.	20 min.	5 min.	$ .08	$ .07
24	1,560	10 hrs.	8 hrs.	2 hrs.	1.90	1.65
Hydraulic Extractor						
1	175	12 min.	10 min.	2 min	$ .032	$ .05
40	7,000	8 hrs.	6⅔ hrs.	1⅓ hrs.	1.33	2.00

Recapitulation of yearly labor savings for 500 bed hospital laundry

Labor costs, hydraulic extractor	$.0211 per 100 pounds of linen
Labor costs, centrifugal extractor	.113 per 100 pounds of linen
Difference	.0919 per 100 pounds of linen

A timely compilation of facts on hospital fire safety

HOSPITAL FIRE SAFETY, 1949. 136 pp. Boston: The National Fire Protection Association. 1949. $1.50.

LAST month's fire at Mercy Hospital, Davenport, Iowa, combined with the Effingham, Ill., disaster of last April, helps make "Hospital Fire Safety, 1949," a timely and important document for hospital readership.

Compilation of the materials on hospital fire safety contained in this volume is, in effect, a tribute by the National Fire Protection Association to the activities of hospitals in the interest of fire safety.

This volume is the first in which the NFPA has compiled previously published materials of interest to a specific occupancy group. Many of the materials in the book reflect American Hospital Association fire safety education and standardization.

One of the most useful items in the volume is a compilation of excerpts from the NFPA Building Exits Code applying specifically to hospitals. In addition to Section 24 of the code, dealing expressly with hospitals, these excerpts include the sections on stairways and horizontal exits, general provisions with respect to aisles and corridors, and appropriate excerpts dealing with exit illumination and signs.

Also contained in the book is the new NFPA "Recommended Safe Practice for Hospital Operating Rooms," which was discussed in HOSPITALS for December.

The full report of the Effingham disaster is reprinted from the NFPA quarterly, along with a report of Oregon's Fairview fire of May 1949, which was attended by no loss of life in spite of construction highly vulnerable to fire.

Statistics and reports of hospital fire losses are extracted in the volume from the NFPA publication, "Fires in Hospitals and in Institutions." Photographic illustrations in this section of the book tell their own story of the need for fire protection.

This volume is not a text for the use of the fire protection engineer. It does, however, gather together for the hospital administrator and the hospital's chief engineer salient reference materials necessary in the development of an adequate fire safety program.—R.H.

Accounting handbook

The first section of a handbook to replace the American Hospital Association's basic hospital accounting and statistics manual is to be distributed this month to institutional members of the Association.

The overall title of the publication is "Handbook of Accounting, Statistics and Business Office Procedures." The handbook, to consist of four sections and one supplement, is designed as an amplification and revision of the hospital accounting and statistics manual originally published in 1922.

Section One of the handbook—"Hospital Statistics and Uniform Classification of Accounts"—contains recommended uniform classification of accounts, uniform major statistical terms and definitions and a handy checklist of supplies, expenses and equipment.

Material for this and succeeding parts of the series was compiled by the American Hospital Association's Committee on Accounting and Statistics, made up of nine leaders in hospital finance and administration.

Inquiries about books reviewed in the Literature department should be addressed to the American Hospital Association Library — Asa S. Bacon Memorial, 18 E. Division Street, Chicago 10. The department is edited by Helen V. Pruitt, librarian.

Polish health program

PUBLIC HEALTH IN POLAND. 31 pp. New York: Polish Research and Information Service. 1949.

The Polish Research and Information Service has been issuing various reports on social developments in postwar Poland, each report discussing a particular phase of activity. A factual account of existing health and hospital conditions in Poland adds to our knowledge of international hospital affairs. The report opens with a description of the organizational structure of public health—the ministry itself and local government health departments. The national health care system is the overall program for all types of facilities, including hospitals. Programs for special population groups, such as rural, are outlined briefly. The report concludes with recommendations of measures to assure better distribution of health personnel as well as better trained personnel.

Of the 677 prewar hospitals, with 75,000 beds, 33 hospitals, with 9,553 beds, were completely destroyed. One hundred hospitals, containing 54,000 beds, were substantially damaged.

With aid from UNRRA, construction was begun, and on January 1, 1949, Poland had 651 hospitals with about 100,000 beds. A six-year plan provides definite goals to be reached by 1956. Before the war, hospitals were divided into classes in accordance with ability to pay. Now all facilities are available equally. There is, of course, an insurance system in operation in Poland to pay for hospital care for employed persons. This is compulsory for every employed person and is paid for entirely by the employer.—H. V. P.

· · DISASTER · ·

Davenport *Daily Times* photo by Phil Hutchison

Davenport Hospital Fire Tragedy

Last month's headlines told the tragic story of the hospital field's second major fire within a year. A $200,000 blaze destroyed the St. Elizabeth's psychiatric ward for women of Mercy Hospital in Davenport, Iowa. When it was over, 41 persons were dead.

Last April it was the St. Anthony's Hospital in Effingham, Ill., and 75 lives were lost.

The St. Elizabeth's psychiatric ward for women was more than 63 years old, having been built in 1886 according to Sister Mary Annunciata, R.S.M., administrator of Mercy Hospital. The ward, one of six buildings that made up the hospital plant, consisted of two floors, a basement and an occupied attic (see photograph on page 108).

The fire broke out shortly before 2 A.M. Saturday, January 7. An attendant in the main building notified the Davenport fire department at 2:06 A.M., and the first of 14 companies of firemen arrived about a minute and a half later.

At that time, fire was coming from only a few windows, but in a few moments it had mushroomed through the entire building. By 4:30 A.M., when firemen turned off the hydrants, only the ice-crusted walls remained. The temperature was about 19° above zero.

Sister Mary Annunciata said there were 65 persons in the building when the fire began, 61 of whom were women. She said there were 48 chronic patients, all women, and 11 female acute patients and three male acute patients. In addition there were two nurses and one male attendant inside the building. All the patients, the administrator said, were ambulatory. The hospital also has a psychiatric ward for men in another building.

Rescue efforts were hampered by bars or screens on all windows. Fortunately, the bars were not embedded in the masonry but were attached to the wooden window casings with lag screws, so firemen were able to chop some of them

Davenport *Daily Times* photo by Phil Hutchison

VIEW of the St. Elizabeth psychiatric ward for women before it was destroyed by the fire.

loose with their axes. The bars, however, are blamed for some of the deaths. Altogether 24 patients were removed by firemen, but not all of them lived. One attendant also died in the fire. All of the victims were women.

Part of the main hospital was made into a temporary morgue. The living patients were transferred to the main hospital for treatment. The fire did not damage any of the five other buildings on the hospital grounds.

Structural weaknesses: The fire admittedly was set by a voluntary intermittent patient, using a cigaret lighter which she was not supposed to have had. The spread of the fire was attributed to structural weaknesses in the building.

James K. McElroy, assistant technical secretary of the National Fire Protection Association, flew to Davenport from Boston to investigate the fire. He reported that a major factor in the fire's rapid spread was an old unused hot-air heating system that had been completely concealed during earlier remodelings of the building. The fire, he said, burned through the surface of the main floor wall, uncovered the old registers and shot up the unused hot-air duct to the attic.

At the same time, he said, fire had burned through the wooden window casings and had found a narrow air space between the outer brick and the wooden laths which held the interior plaster. The fire shot upward in this narrow space at the same time that flames were roaring up the old hot-air system. When the fire reached the attic from these two directions, Mr. McElroy said, "It lifted the roof almost off the building, and then the floors started to collapse."

Speaking later of the hot-air system, Mr. McElroy said it had been so well covered in the many remodelings the building has had that "even the best fire inspectors would never have known it was there." This concealed heating shaft, he said, was "the most unusual thing I have ever seen."

Contrary to some newspaper reports, the building had no open stairwells. The two inside staircases were enclosed with metal lath and plaster and had a fire rating of about 20 minutes, according to Mr. McElroy.

The outside fire escape proved of no value, as the barred windows made it inaccessible from the inside of the building.

Most of the patients in the building were old and senile, Mr. McElroy said.

The woman who admitted starting the fire was in one of several single rooms on the main floor. The second floor and attic were dormitories, with 30 to 40 persons on the second floor and 14 in the attic, all in multi-bed rooms. Part of the building had been remodeled only a week earlier.

No sprinklers: The building had no automatic fire detection equipment and no fire sprinkler system. Fire Chief Lester Schick said that a Davenport fire marshal had recommended two years ago that the hospital install a sprinkler system. Sister Mary Annunciata, however, said that to the best of her knowledge the sprinklers were not recommended.

During his investigation, Mr. McElroy spoke with Sister Mary Margaret, the sister superior, who said that someone once had advised installing sprinklers but that someone else had told her not to bother with them.

The sister superior said that no salesman ever had tried to sell her sprinkler or fire detection equipment.

Mr. McElroy emphasized that the hospital apparently had had no plan to cover such an emergency,

Davenport *Daily Times* photo by Phil Hutchison

FIREMEN removed some of the patients even though the windows were barred. The bars were not embedded in masonry but were fastened to wood. Firemen chopped some of them out.

Davenport *Daily Times* photo by Phil Hutchison

AN AERIAL view of the fire-gutted psychiatric ward for women. Some other buildings of Mercy Hospital may be seen in the background.

or at least no plan was put into use. "The attendants did not know what to do," he said. He also said that the administrator and engineer were not familiar with recent fire safety information published by the National Fire Protection Association and the American Hospital Association.

The woman who admitted setting the fire had not been committed to the institution but was a voluntary patient. She was described as an intermittent patient, one who appears normal at times and abnormal at others. With the lighter, a Christmas gift, she is believed to have ignited a piece of paper, then the inflammable curtains. The fire spread to the wooden window casing and a wallboard partition on one side of the room, then broke out into the hallway and spread through the entire building.

Apparently the woman knocked out a wire-glass transom and escaped from the building. She was returned later and a charge of murder by arson was entered against her. She has since been committed to a mental institution. The cigaret lighter, bearing identifying initials, has been found in the debris.

To facilitate the discovery and removal of bodies after the fire, a bulldozer and a clamshell shovel were used on the building, clearing rubble and toppling dangerous walls. As this was done before the cause of the fire had been determined, Fire Chief Schick was asked if this action might obliterate the possible origin.

"Knowing the approximate area of origin, and in view of weather conditions," Mr. Schick said, "it was imperative that the search for bodies be completed before the debris froze. It was not necessary to touch the area of origin with the clamshell shovel. I can see where under certain conditions a clamshell would obliterate the possible cause of fire."

Disaster Figures

The St. Anthony Hospital fire, which took 75 lives at Effingham, Ill., April 4, 1949, was rated as the worst single disaster for last year by statisticians of the Metropolitan Life Insurance Company. More than 1,200 lives were lost in catastrophies during 1949, making the death toll 150 more than in 1948.

Increases were shown in 1949 over 1948 in the number of catastrophe deaths from automobile accidents, fire and explosions and from natural disasters such as tornadoes, floods and blizzards. Deaths in civilian air transportation rose only slightly.

A new hospital is being planned at Effingham to replace St. Anthony's Hospital. Residents of the town have contributed $600,000 toward the new hospital which will cost an estimated $1,500,000. The balance will be financed by federal and state aid. Construction is expected to begin in May.

Plans for 52nd Annual Convention

Preliminary arrangements have been approved and detailed plans now are being worked out for the Association's fifty-second convention. General sessions, business meetings, panel discussions and forums, and evening social events will make up the program to be presented September 18-21 at Atlantic City. One of the outstanding features of the program this year will be a contest for administrators who have devised a technique, procedure or routine effective in hospital administration.

On September 17, the Sunday preceding the official opening of the convention, the American College of Hospital Administrators will conduct its annual convocation for new nominees, members and fellows. The Association's House of Delegates also is scheduled to meet on Sunday.

Contest: For the first time, the Committee on Convention Program Planning has initiated a contest for administrators, which will take place at the Tuesday morning general session, September 19. Administrators who have developed a technique, procedure or routine that they now are using are eligible to enter the contest. To be known as the "T.P.R. Contest," its purpose is to recognize the resourcefulness of administrators and to give other hospitals the opportunity of benefiting from administrative methods in use in other hospitals. During the first week of February, an application letter was to have been sent to all member hospitals explaining the rules of the contest. Administrators who wish to enter will write 500 words or less describing the technique now in use. Photographs or diagrams are acceptable but no apparatus is to be sent to the Chicago headquarters office. Completed applications must be in the mail by May 1 and winners of the preliminary competition will be announced June 1. These contestants, who will be chosen by members of the Convention Program Planning Committee, will appear at the Tuesday morning general session in Atlantic City. Each administrator will be given five minutes to explain his technique. The three final winners, chosen on the basis of an audience applause meter, will receive cash prizes and a certificate of recognition from the Association.

Contestants have been asked to remember that no equipment used in connection with their presentation can be for sale or in the process of commercial negotiations. If the Administrator wishes to bring any equipment to Atlantic City he must bear the expense. The Association will reserve the right to publication, with full credit given to the contestant.

General program: Five general sessions will be held during the convention, one Monday afternoon and two each on Tuesday and Thursday. The Thursday morning session will be a forum discussion of great importance to small hospitals. Questions to be discussed by the panel will be submitted by administrators of small hospitals.

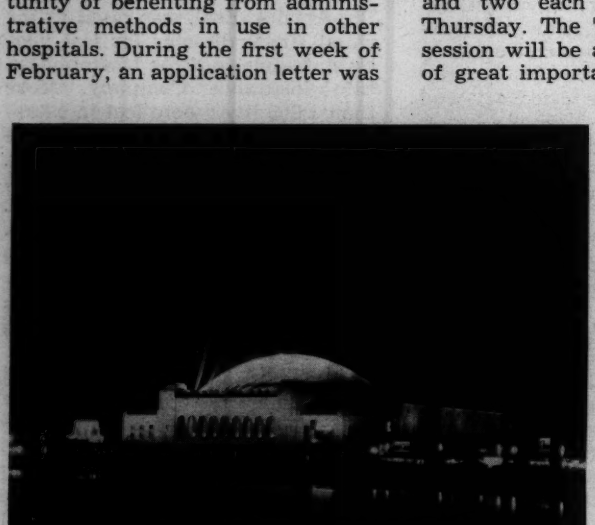
Among the general subjects to be discussed at the sessions are: Economics, politics and medicine in the future; hospital finances; adequate reimbursement for the indigent; the effect of Blue Cross prepayment plans upon the finances of the hospital; group medical practice and the hospital; organized outpatient services; community service for the hospital patient and the effects of clinical advances in medicine on hospital practice.

Theme of the Tuesday afternoon and Thursday afternoon general sessions will be, "Organizing the Hospital to Meet the Changing Scene." Emphasis will be on finances at the Tuesday session and on medical practice at the Thursday meeting.

Group meetings are being planned for Wednesday morning, with some discussion groups continued into Wednesday afternoon. Purchasing agents, hospital architects, nurse anesthetists, Blue Cross plans, state planning directors, and women's auxiliaries will conduct meetings at this time.

Special events: The fifty-second convention will be in session officially Monday morning, September 18, when the exhibits are opened. This year more floor space is being used, there will be a greater diversity of products and a larger volume of materials. The exhibits will be displayed and the general meetings will be held at the Convention Hall.

Two important evening events



MEETINGS and exhibits will be at the Atlantic City Conventional Hall.

DELEGATES will see Atlantic City's Boardwalk and fine beaches.

will be the annual informal reception and dance Monday evening and the annual banquet Thursday, September 21. Dr. Charles F. Wilinsky will be installed as president of the Association at the banquet. A guest speaker will address the banquet audience.

In addition to the Sunday afternoon session, the House of Delegates will meet Wednesday evening. New officers for the 1950-51 year will be elected at this meeting.

Housing: Application forms for hotel accommodations in Atlantic City will be mailed to all members early next month. The completed forms should be sent to the American Hospital Association Housing Bureau, 16 Central Pier, Atlantic City, N. J. No deposit is required. The Association headquarters will be at the Traymore Hotel.

Because Atlantic City is one of America's most famous and luxurious resort cities, members may wish to arrive a few days earlier or remain a few days after the convention.

Committee: Program plans for the fifty-second convention are being developed by the Committee on Convention Program Planning which met for the first time on December 3 in Chicago. Chairman of the group is Association President John N. Hatfield. Members of the group are: Dr. H. A. Black, first vice president; William P. Earngey Jr., second vice president; Rt. Rev. Msgr. Robert A. Maher, third vice president; Dr. Edwin L. Crosby, chairman, Council on Professional Practice; Dr. Jacob J. Golub, chairman, Council on Hospital Planning and Plant Operation; Ritz E. Heerman, chairman, Council on Administrative Practice; Dr. Harold C. Lueth, chairman, Council on Education.

Membership Gain

Both institutional and personal memberships in the Association have shown substantial gains for the year 1949. As of December 21, there were 4,207 institutional members. This represents a gain of 130 over the total at the end of 1948, when there were 4,077 institutional members.

Personal membership also increased by 166 during 1949. At the end of 1948 there were 3,375 personal members compared to 3,541 by December 31, 1949. Of the 1949 total, 284 were life members and 74 were honorary members of the Association.

· · CONSTRUCTION · ·

1,000th Hospital

Friday the thirteenth was a lucky day for Canton, N.Y. It was the day on which the surgeon general approved an application for a 50-bed general hospital for that upstate community. This $525,000 hospital became the one-thousandth project approved under the Hill-Burton Act. The project earlier had been approved by the New York State Joint Hospital Survey and Planning Commission.

Construction of this hospital, one of three in the New York "north country" which were conceived, planned and designed as a single operating unit, will begin this spring. The other two hospitals now are under construction and are located at Gouverneur and Alexandria Bay. These hospitals are named for the principal sponsor, Edward John Noble, chairman of the board of the American Broadcasting Company. The cost is being financed by a $175,000 contribution from the Edward John Noble Foundation, $175,000 by the citizens of the area and $175,000 in federal funds.

Though the concept was aimed and the hospitals designed to avoid a duplication of services, each facility was tailored for the individual community in which it is located. Each unit was developed with maximum local participation, according to Dr. John J. Bourke, executive director of the New York State Joint Hospital Survey and Planning Commission, and John G. Steinle, hospital program coordinator for Region 11 of the Public Health Service.

Gouverneur, with 64 beds, which now is approximately 50 per cent complete, was designed as the nucleus for the coordinated group. This hospital will have a number of central facilities for servicing the other units. This includes a laundry that will accommodate the other two hospitals as well as another hospital under construction at nearby Star Lake. The Gouverneur Hospital has central storage space for bulk supplies for the entire group. Because of the long winters and occasional isolation of these communities, additional storage space was provided.

While the Alexandria Bay and the Canton hospitals have diagnostic radiology facilities for general use, equipment for therapy and extensive diagnosis was provided in the Gouverneur Hospital. The radiology department was made more extensive to provide for constant rechecking of employees in the area's principal industry — chest hazardous talc and lead mining.

It is planned the North Country Hospitals will have a close working relationship with Syracuse University Medical School. Autopsy facilities will be located in the Gouverneur and Canton hospitals, which will be the principal centers for an affiliated teaching program. In embracing preventive and curative medicine, the county health laboratories are to be planned as part of the Canton hospital.

In planning, consideration was given to include additional outpatient and group practice units. For example, initially, a major operating room and an emergency operating room

CONSTRUCTION on the 51-bed hospital at Canton, N. Y. will begin late this spring. This is the 1,000th Hill-Burton hospital. (Architects: Skidmore, Owings and Merrill, New York.)

will be provided in Alexandria Bay. It is believed, however, that as the use pattern of the total facilities represented in the three hospitals develops the number of operating rooms can be cut down. Thus, the emergency operating room was designed so that it can be converted easily into an outpatient facility.

None of the hospitals individually could provide adequate resources for ideal nursing education. The three hospitals as a single unit, however, represent 125 beds with all necessary ancillary teaching resources. The basic technical facilities of a school of nursing will be established at Canton in close coordination with St. Lawrence University. Similarly, no one community could support the balance of specialty staff required for modern hospital care. Plans are being developed whereby the services of required specialists will be pooled.

In developing the plans for each individual hospital, the need of all three hospitals was taken as a point of departure. A breakdown was made for the three separate facilities with consideration given to the base requirements and the special problems of each community. For example, in Canton provisions had to be made for the hospitalization of college students for St. Lawrence University and the New York State Agricultural and Technical Institute. The local requirements of the summer population in Alexandria Bay were included in the planning.

The program was developed cooperatively between the local communities, the Edward John Noble Foundation and the Syracuse Regional Council. The architects for all three projects are Skidmore, Owings and Merrill, New York City.

Maryland Fund Drive

The Anne Arundel General Hospital at Annapolis, Md., recently completed a successful fund drive, raising $684,000 for additions and alterations. Plans and specifications now being prepared indicate an estimated cost of $1,000,000. It is expected that bids will be taken in midsummer if federal funds for the project are available at that time.

Formerly the hospital was known as the Annapolis Emergency Hospital.

Hill-Burton Summary

More than 1,000 applications filed under the Hospital Survey and Construction Act had been initially or finally approved by mid-January. An analysis report of the first 10 months of 1949 shows that total construction for the 974 applications approved at that time totaled $630,837,419. The federal share is $188,149,740. These figures were compiled by the Division of Hospital Facilities and the Division of Medical and Hospital Resources of the Public Health Service.

The majority of all approved applications are for general hospital projects. A breakdown of the various types of hospitals being built shows that 77.7 per cent of the applications were for general hospitals; 4.5 per cent for mental hospitals; 2.8 per cent for tuberculosis hospitals; .8 per cent for chronic disease facilities, and 14.2 per cent for public health centers.

Of the approved general hospital projects, about half were for completely new facilities. Approximately two-thirds of these new hospitals will have fewer than 50 beds but only about one-third of the federal funds is going into the construction of these smaller hospitals. The Public Health Service's report also showed that 71.1 per cent of the new general hospitals are being built in towns of less than 5,000 population.

Illinois Expansion

As part of the expansion program of the Chicago medical center district, construction has been started on a 14-story addition to the University of Illinois Research and Educational Hospitals. The new addition will provide facilities for 411 bed patients, increase the services of the outpatient clinic and make possible the expansion of teaching functions.

The entire first floor and about one-third of the second, third and fourth floors will be devoted to outpatient services. Several rooms on the lower floors will be for special research activities.

Fund-Raising Results

Recent building fund campaigns to expand 26 hospitals and construct eight new ones report contributions of $31,960,048. A total of $9,315,221 was subscribed in 11 completed campaigns, whose objectives totaled $8,450,000. These hospitals are:

Memorial Hospital, Danville, Va.; St. Mary's Hospital, Amsterdam, N. Y.; Washington County Hospital, Hagerstown, Md.; York (Pa.) Hospital; a new 31-bed hospital at Walton, N. Y.; Citizens General Hospital, New Kensington, Pa.; Placid Memorial Hospital, Lake Placid, N. Y.; Clinton (Mass.) Hospital; Boston Lying-in Hospital; Webber Hospital, Biddeford, Me., and the Carrie F. Wright Hospital, Newport, N. H.

SURGEON GENERAL Leonard A. Scheele was interviewed by Nancy Craig of the American Broadcasting Company in conjunction with the new Edward J. Noble Foundation hospitals.

College of Surgeons Annual Survey

A total of 134 hospitals was added to the approved list of the American College of Surgeons in its thirty-second annual survey. As of December 31, 1949, there were 3,284 approved hospitals in the United States, Canada and several other countries which had met the standards of the college's hospital standardization program. At the end of 1948 there were 3,150 approved hospitals.

The survey list in 1949 included 3,998 hospitals of 25 or more beds, of which 82 per cent are approved. Of the 3,284 total approvals, 2,981 or 74.5 per cent are fully approved and 303 or 7.5 per cent are provisionally approved.

In the 100-bed-and-over classification, in which 2,981 hospitals were under survey, 2,189, or 94.8 per cent now are approved. Hospitals under survey in the 50 to 99-bed size numbered 1,068. Of this total, 797, or 74.6 per cent are approved. Hospitals under survey in the 25 to 49-bed size totalled 621, of which 298, or 47.9 per cent, are approved.

Census in Hospitals

Patients in general hospitals will be enumerated along with the rest of the population in the Seventeenth Decennial Census to be taken in April, according to plans released by the Census Bureau. Officials of the bureau, charged by law with enumerating every person who can be found, have assured hospital authorities that the count will be carried out with a minimum of disturbance to routine.

Patients who are able will be requested to fill out their own reports. This consists largely of checking Yes or No answers. When patients are too ill to fill out the schedules themselves, census enumerators will obtain as much information as possible from hospital records. Wards or services devoted to caring for mental, chronic or tuberculosis patients in general hospitals will be treated by enumerators like institutions providing specialized care for these patients. When necessary, in certain institutions and general hospitals, Census Bureau field officials are authorized to employ staff personnel to assist in enumerating patients.

Resident medical staff members are to be enumerated on regular population schedules by Census Bureau workers.

Brown Report Opposition

At a meeting in Statesville, N. C., last November, the Iredell-Alexander County Medical Society unanimously adopted a resolution opposing all recommendations made in the 1948 report, "Nursing for the Future," by Esther Lucile Brown, Ph.D. In its statement, published in pamphlet form for general distribution, the medical society went on record as opposing the creation of a national accrediting agency for schools of nursing, saying that many state-accredited hospital schools of nursing would be closed.

The second point made in the resolution was that the general public welfare should be the top consideration in setting standards for nursing schools. For this reason, members of the medical society proposed a reorganization of the North Carolina Board of Nurse Examiners and the state's Joint Committee on Standardization to provide a more equitable representation of the public interest on these boards.

Polio Research Funds

A total of $849,738.68 in March of Dimes funds has been awarded to 29 technical and scientific institutions throughout the United States and Canada by the National Foundation for Infantile Paralysis for research and educational projects. These additional studies bring

BETH ISRAEL ART SHOW

New York *Daily News* photo

A three-day art exhibit made up of work done by those directly associated with Beth Israel Hospital, New York City, was presented early in December. The display, set up in the solarium of the hospital, consisted of every type of art medium technique—oils, water colors, pen and ink drawings, pastels, crayon drawings, wood carving, sculpture, tooled leather and hammered copper. The exhibit presented the work done by a broad cross-section of those directly associated with the hospital, including visiting and house physicians, graduate and student nurses, laboratory technicians, members of the secretarial and clerical staffs, representatives of the engineering department and the director of religious activities.

Present at the official opening of the art show was Charles H. Silver, president of the hospital. (See picture above, center.)

The show may become an annual affair.

the total granted by the foundation since 1938 to more than $11,000,000 each in the fields of research and education.

Grants will go to hospitals and medical schools for research in diagnosis, prevention and the methods by which the disease is spread. In addition studies will be made to determine the influence of nutrition on susceptibility and resistance to poliomyelitis, methods of treatment and biochemical and physiological changes in atrophic and immobilized muscle.

Additional appropriations will be used to finance short-term courses in orthopedic nursing for graduate nurses, special training for graduate physical and occupational therapists. Other courses to be sponsored by the foundation will be available to physicians for study in physical medicine and rehabilitation.

Hospital Open House

Hanover (Pa.) General Hospital recently held an open-house so that residents of the town could inspect a number of improvements completed at the hospital. The new, enlarged and modernized facilities include a thoroughly equipped x-ray department, an enlarged kitchen and a new laundry and boiler room.

The x-ray department of the Hanover General Hospital consists of a waiting room, an office, several diagnostic and treatment rooms, dressing rooms and a dark room. Special equipment in this department consists of eight fluorescently-lighted view boxes, an x-ray stereoscope, two new x-ray machines and a deep therapy machine.

Advisory Group

Dr. Marcus D. Kogel, commissioner of hospitals of New York City, has appointed a committee of 12 physicians to study the construction program of the Department of Hospitals. The construction program now being planned in New York City is the result of a $150,000,000 bond issue approved during the last election.

Members of the medical advisory group will evaluate and analyze new projects, advise on the order of priority and determine the total needs for the city. Another important function of the group will be to plan for adequate medical care for ambulatory patients.

Dr. Kogel is the chairman.

· · PREPAID CARE · ·

Bank's Progress

The Inter-Plan Service Benefit Bank completed its first eight months of existence with a total 44,335 claims being processed. Of this total, 19,825 claims were processed in the last quarter. It is expected that approximately 20,000 cases a quarter will be handled in 1950.

From May 1, to December 31, of last year, 319,655 days of care were given to Blue Cross members under the inter-plan bank. The average length of stay was 7.21 days.

When the program went into effect last May, 47 plans were participating. As of January 1 of this year, 63 plans were participating. One of the new plans has its headquarters in San Juan, Puerto Rico.

Bank payments to host plans during the eight months from May 1 to December 31 totaled $3,714,734.84 or an average of $83.79 per patient. It is predicted that, based on the bank's experience, the 1950 volume will exceed $7,000,000.

A revised formula for charging home plans went into effect January 1 with the approval of the participating plans and the commission. This formula does not affect host plan payment to hospitals for Blue Cross members.

At a meeting of the bank board last January 11, it was decided that the definition of an "inpatient" would be that of the host plan.

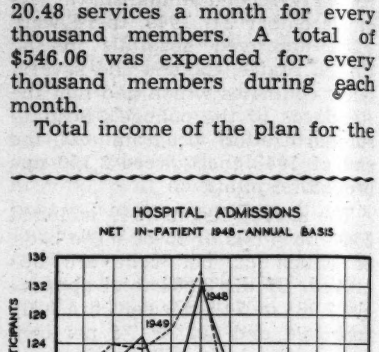
Joint Meeting

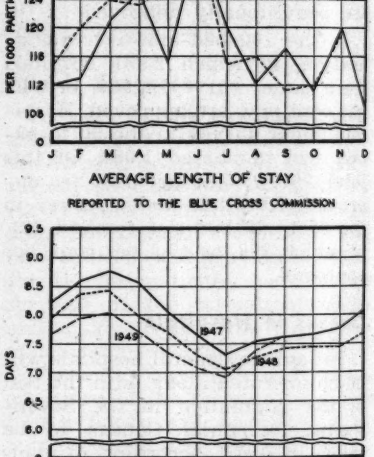
The 1950 annual joint conference of Blue Cross and Blue Shield plans will be held February 27 to March 1 at Montreal, Can. All Canadian plans will serve as hosts to the conference. Officials of the Blue Cross Commission and the Blue Shield Commissions are scheduled to meet on Saturday and Sunday, February 25-26, and Wednesday afternoon, March 1.

Blue Shield Experience

A statement released by the Blue Shield Commission covering its experience for 1949, reveals that 1,669,799 members received medical and surgical care during the year. For this total of surgical and ancillary services, the commission paid $44,242,345.44. The average cost to the commission for each service was $26.50. There was a total of 240 services for every thousand members during the year or roughly one service for one out of every four members. Broken down into monthly figures, there were 20.48 services a month for every thousand members. A total of $546.06 was expended for every thousand members during each month.

Total income of the plan for the





ADMISSION-STAY

An average of 119 Blue Cross plan members per thousand were admitted to hospitals in November. This was seven admissions more than in the previous month when an average of 112 per thousand plan participants entered hospitals. The November 1949 rate was slightly lower than during the same period last year when 120 patients per thousand were hospitalized.

The average length of stay for plan members rose for the third month in succession from 7.62 days in September to 7.64 days in October. The October 1949 length of stay also was longer than that of the same period in 1948 when the hospital stay averaged 7.46 days. The October figure for 1949 was .18 days longer than the October 1948 average and slightly lower than the 7.68 average for October 1947.

first nine months of 1949 was $87,586,654. Of this total, $70,837,221, or 80.88 per cent, was paid to doctors; $11,559,774, or 13.19 per cent, was for operating expenses, and $5,189,659, or 5.93 per cent, was held in reserve. Total assets for Blue Shield plans as of September 30, 1949, was $49,720,689. Almost half of the amount, or $24,591,765, was held in reserve.

In addition to its financial report, the Blue Shield Commission reported that 67 plans had an enrollment of 11,302,233 as of September 30, 1949. Seventy-nine medical-surgical plans reported an enrollment of 13,138,790 for the first nine months of 1949. On December 31, 1949, there was a total estimated enrollment in medical-surgical plans of more than 14,000,000.

During the third quarter of 1949 several Blue Shield plans showed a notable increase in enrollment. Cities and the number of new members are: New York City, 78,455; New Haven, 78,413; Indianapolis, 46,061; Detroit, 39,906; St. Paul, 38,104; San Francisco, 37,898; Harrisburg, Pa., 30,052.

The percentage of state enrollment is highest in Delaware where 48.46 of the population is enrolled. Michigan has 22.94 per cent enrolled and the District of Columbia, 21.80 per cent.

Successor Unnamed

As yet no one has been named to succeed Dr. Paul R. Hawley as chief executive officer of the Blue Cross and Blue Shield commissions. On March 1 he will become director of the American College of Surgeons. It is expected that the new executive officer will be named at the annual conference of the commissions late this month.

Dr. Hawley has announced that in addition to his new duties as director of the college he will retain the presidency of Blue Cross' Health Service, Inc. In accepting the directorship of the college Dr. Hawley said, "The principal reason for my acceptance of this new position is the growing necessity for even closer association of the voluntary nonprofit plans for meeting the costs of medical and hospital care with the producers of these services. I would never have considered lessening my responsibilities with Blue Cross and Blue Shield, which are the greatest social movements of our time, had I not become convinced that I can be of greater service to them in the new position."

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EXAMPLES OF SOME OF OUR RECENT CAMPAIGNS

Annapolis Emergency Hospital	June, 1949
Annapolis, Maryland	Population: 13,069
Goal (for New Wing)	$350,000
Raised	$508,315
Number of Gifts	4,820
Total Cost (Including both fixed fee and all campaign expenses)	6.0%

★ ★ ★

Deaconess Hospital	December, 1948
Grand Forks, North Dakota	Population: 20,228
Goal (for New Wing)	$500,000
Raised	$502,086
Number of Gifts	4,260
Total Cost (Including both fixed fee and all campaign expenses)	6.4%

★ ★ ★

CORNING HOSPITAL	**February, 1949**
Corning, New York	**Population: 16,212**
Goal (for New Wing)	**$325,000**
Raised	**$451,600**
Number of Gifts	**7,894**
Total Cost (Including both fixed fee and all campaign expenses)	**5.7%**

★ ★ ★

***Peninsula General Hospital**	May, 1949
Salisbury, Maryland	Population: 10,313
Goal (for New Wing)	$350,000
Raised	$473,725
Number of Gifts	3,798
Total Cost (Including both fixed fee and all campaign expenses)	6.2%

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Program Plans for 1950 Institutes

Plans have been announced for 13 American Hospital Association-sponsored institutes to be conducted during the next several months. This year, for the first time, the Association is sponsoring several two-day institutes in addition to the regular schedule of five-day institutes. The two-day meetings will be conducted in conjunction with various state and regional hospital association meetings.

A brief description of a number of the institutes follows:

Five-day: An institute for nurse anesthetists will be conducted in Chicago, February 13-17. Different techniques of the major types of anesthesia will be stressed. Each day will be devoted to the study of a different type of anesthesia. Students will have an opportunity to observe the use of various anesthetics at several Chicago hospitals. This institute is conducted in cooperation with the American Association of Nurse Anesthetists.

Hospital engineers will discuss all phases of maintenance, fire protection and employee training at an institute April 24-28 at St. Louis.

At an accounting institute, May 22-26, much of the discussion will center around the first section of the new accounting manual, "Uniform Hospital Statistics and Classification of Accounts."

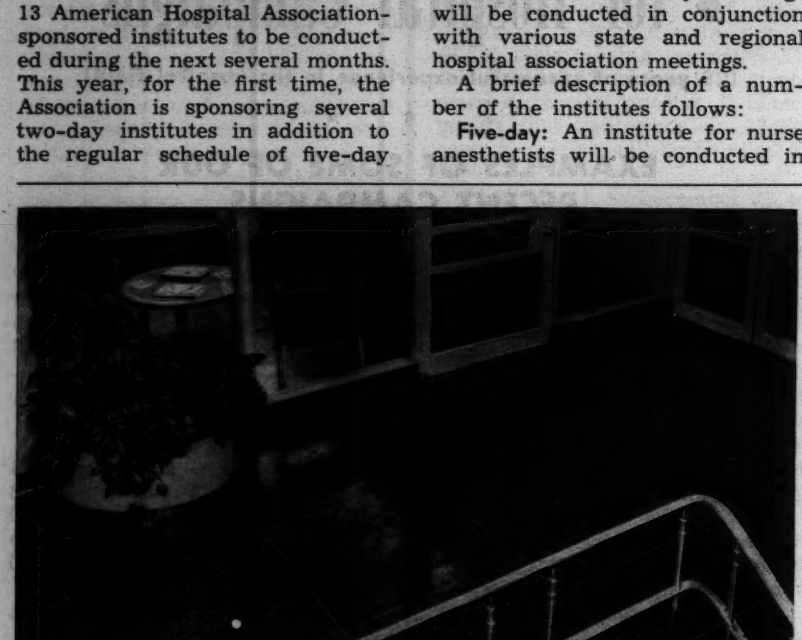
Emphasis at the pharmacy institute, June 19-23 at Ann Arbor, Mich., will be on the administration of the department itself.

The five-day personnel institute scheduled for July 10-14 at Cornell University, Ithaca, N.Y. will be specifically for persons who attended the previous workshops at Cornell and Galesburg. An evaluation of supervisory training programs will be the theme. In addition to this institute, a refresher course will be offered October 23 to November 3 at Cornell. This course will be for personnel directors who have had no formal training in the field.

Two-day: Two purchasing institutes planned will deal with the purchasing of meat, canned goods and textiles, organization of the department, records and procedures, use of standards and specifications and purchasing in a small hospital. The first institute will be March 10-11 at Galveston with the Texas Hospital Association. The second will be April 10-11 with the Midwest Hospital Association at Kansas City.

The personnel institute to be held in conjunction with the New England Hospital Assembly, March 30-31 at Boston, will stress selection techniques and supervisory training.

Three two-day accounting institutes will be conducted in various sections of the country. At the Tri-State Hospital Association meeting in Chicago, May 4-5, a completely new topic, credit and collections,



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will be discussed. The new accounting manual will be discussed at the other two meetings. One will be with the Southeastern Hospital Conference, April 3-4 at St. Petersburg. The other will be with the Carolinas-Virginias Hospital Conference at Charleston, May 9-10. A series of short presentations with questions and discussion will make up the program of these institutes.

Food production, food service and menu planning will be the basis of discussion at the dietetics institute, May 22-23, when the Middle Atlantic Hospital Association meets at Buffalo.

Tuition for the two-day institutes is $10. Applications for attendance will be mailed to all member hospitals approximately two months before each institute is conducted.

Surgeons' Meetings

Seven sectional meetings for the medical profession are being sponsored by the American College of Surgeons during the first four months of this year. Although there are no geographic restrictions for persons attending the meetings, each meeting has been scheduled for a different part of the country so that doctors, medical students and hospital personnel may more easily attend.

Medical motion pictures, scientific lectures and round table conferences make up the program.

The first of the seven two-day meetings was conducted at Belleair, Fla., last month. Locations and dates of the remaining six sessions are: El Paso, Texas, February 13-14; Louisville, Ky., February 20-21; Pittsburgh, March 14-15; Montreal, March 20-21; Winnipeg, April 3-4, and Seattle, April 10-11.

Michigan Institute

The Michigan Hospital Association, in cooperation with Michigan State College at East Lansing, recently sponsored a three-day institute for administrators. College faculty members and selected hospital administrators presented several round-table discussions dealing with a variety of hospital problems. Subjects under discussion included personnel management, supervisory training, rate structure, statistical analysis and the problems of credit and collection. One session was devoted to the methods of fostering better relationships between the administrator and his staff and board.

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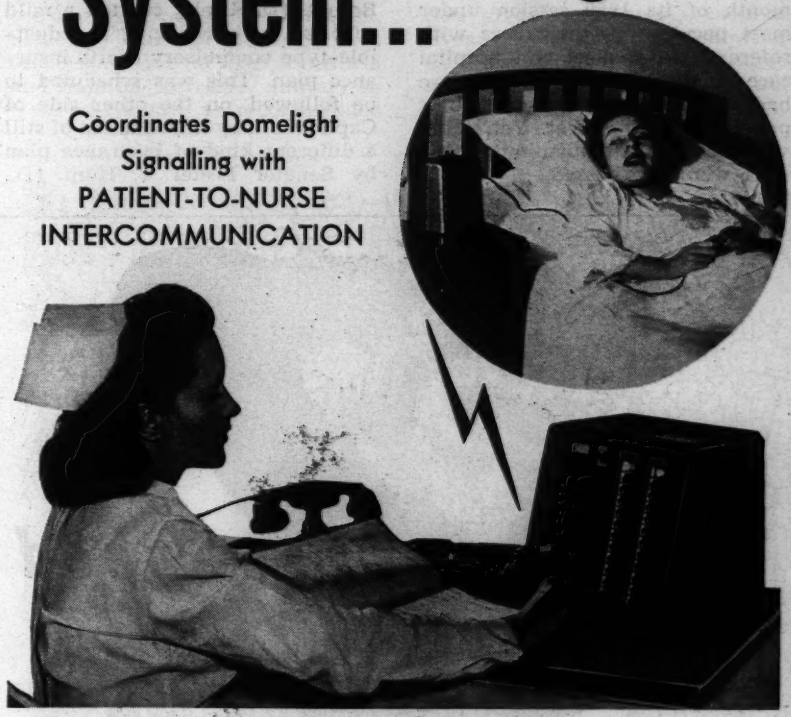

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New Health Legislation in Congress

Congress goes into the second month of its 1950 session under most peculiar circumstances with reference to medical and hospital care legislation. It has never before had so many national health bills pending on its docket. Yet, there was never such unanimity that none would be passed.

On January 16 Rep. Reva Beck Bosone (D., Utah) created a mild surprise by introducing a deductible-type compulsory health insurance plan. This was scheduled to be followed, on the other side of Capitol Hill, by introduction of still a different kind of insurance plan by Senator Lester C. Hunt (D., Wyo.). Anticipated in the future is the deductible-type bill of Senator Paul Douglas (D., Ill.), drafted along lines described in HOSPITALS for January. On January 12 Representative Kenneth B. Keating (R., N.Y.) dropped into the House hopper a bill that would attack the problem by stimulating growth of existing voluntary prepayment plans through a tax-relief route: That is, permitting members of plans to deduct from their income taxes the amounts expended annually for premium payments.

A member of the Michigan Republican delegation in the House is gathering data and trying to decide whether or not to sponsor a national health bill of his own, and certain others are reportedly doing likewise. Still pending, of course, as carryovers from 1949, are the Hill, Taft-Smith-Donnell, Thomas-Murray-Dingell, Flanders-Herter and Lodge health bills.

Yet there is general agreement that Congress will hardly enact any of these measures but, rather, wait to see which of them, if any, captures the fancy of the voting public. Popular reaction, as reflected by correspondence, public hearings and volume of coverage in the press and radio will be gauged carefully in anticipation of the Congressional elections this November. The year 1951, after the Eighty-second Congress has been

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OLEO TAX REPEAL

The first measure approved in the second session of the Eighty-first Congress was the repeal of the 64-year-old federal tax on oleomargarine. The Senate passed the bill on January 18 with a vote of 56 to 16. The new bill, which was approved by the House during the last session, will abolish the 10 cents a pound tax on colored margarine and the one-quarter cent tax on uncolored margarine. Also eliminated are the special handling and license fees. Some restrictions on identification and packaging are incorporated into the bill.

Even though the new law will repeal federal taxes, there still are approximately 16 states that have restrictions on the sale of colored margarine.

installed, is expected to be the year of decision.

Senator Hunt's prospective bill, which he said he would file the latter part of January, has three titles. The first establishes a Department of Health; the second provides for loans and grants to hospitals, physicians, nurses and farmers' cooperatives in "shortage areas," particularly rural; and the third calls for a government-administered program for insurance of medical and hospital care, membership in which would be voluntary and limited to individuals and families with incomes under $5,000.

The lawmaker-dentist's original intention was to have the insured stand at least the first $50 of each year's medical and hospital expenses out of his own pocket, perhaps as much as $100. He finally decided, however, to lower the deductible level to an almost negligible $5 because, as he explained:

"If any larger amount were required to be paid by the patient it would eliminate a great number of people for whom this insurance is intended. Those with incomes of $2,000 or less, in all probability, would not purchase the insurance."

Medical, dental, hospital, home nursing and auxiliary services are provided for under the proposed insurance contract. There would be a 60-day yearly limitation on hospitalization. Tuberculosis and mental conditions are disqualified for hospitalization, save for the first 30 days following diagnosis. Free selection of physician, nurse, hospital or medical group are assured the subscriber.

The program would be administered by a national health insurance board with great authority in the matter of deciding what premium payments and fee schedules should be. Senator Hunt's bill provides that its chairman shall be the surgeon general of the Public Health Service and four members shall be appointed by the President, subject to Senate confirmation. ". . . of whom one," says the proposed bill, "shall be a representative of hospital associations, one shall be a representative of dental associations and two shall represent the public at large but shall not be professional health workers." A $15,000 annual salary is provided for each of the four appointees. They would serve six-year terms.

The Department of Health would absorb all of Public Health Service and the Food and Drug Administration, together with those duties of other Federal Security Agency units (Social Security Administration, Children's Bureau and Office of Vocational Rehabilitation) concerned with health matters. Civilian hospitals in the Panama Canal Zone also would be transferred to the new department. The Hunt bill, however, sidesteps the moot issue of consolidating all federal medical and hospital activities, military as well as civilian, as recommended by the Hoover Commission. With reference to this point, it simply provides for an 18-month study of this question by a nonpartisan commission to be appointed by the President.

Title II of the Hunt bill, on relief of "shortage areas" and subsidization of farmers' health cooperatives, provides for the following: Cash grants to physicians, nurses and other health personnel, as well as to hospitals and clinics, to en-

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courage development and improvement of services in regions where they are now quantitatively or qualitatively deficient; 2 per cent loans for construction and equipment to professional groups; interest-free loans for assistance in construction and equipment of nonprofit hospitals, clinics and health centers that have not received Hill-Burton aid; financial support of farmers' experimental health cooperatives. An appropriation of $50,000,000 annually under Title II is authorized.

It was the suddenness of the introduction of Representative Bosone's bill that provided the element of surprise, rather than its content or the fact that she is sponsor. Nearly a year ago the Utah congresswoman, serving her first term in the House, made a speech championing the clause of deductible-type health insurance. Her new measure, briefly, is patterned after the administration's Thomas-Murray-Dingell bill in its compulsory subscribership features and would be financed by a 3 per cent payroll tax borne equally by employer and employee. Supplemental funds, if required, would be taken from the Treasury up to a limit of 1 per cent of the estimated annual average of all wages.

The Federal Security Agency would be the administering body. Medical services beyond the first $50 in each 12-months period would be paid out of the insurance pool. Twenty-five dollars is the deductible level for dental care. Fee schedules would be fixed by state health committees, each comprising six physicians, three dentists, two nurses, two hospital administrators and two pharmacists. Appointment of these state groups, according to the bill, is to be left to "the medical society having the largest membership in the state."

Like Mrs. Bosone's, the Keating bill was introduced without preliminary notice on January 12. Another point in common is that it was initiated without prior consultation with, or counsel of, any professional or voluntary associations. This plan has as its objective to bring membership in private, voluntary prepayment hospital and medical care plans to maximum figures. The incentive is to make premium payments deductible, for the most part, from income taxes.

For example, families with an annual income under $2,000 could deduct 90 per cent of such premium payments. If the income tax came to $25 for the year and $20 had been expended in premiums, $18 would be deductible, bringing the net tax to $7. In the $2,000-$4,000 income group, 85 per cent would be allowed: $4,000-$6,000, 80 per cent; $6,000-$8,000, 75 per cent; $8,000-$10,000, 70 per cent; above $10,000, 60 per cent.

Meantime, in the waning days of January, ultimate disposition of such other important health measures as federal aid to medical and nursing education, school health services and local public health units still remained in doubt. These, among others, already have been passed by the Senate and administration leaders in the House are confident of final enactment. In any event, hospital and medical leaders are expected to come to Washington in February and March to testify on social security law amendments and new appropriations for the Public Health Service.

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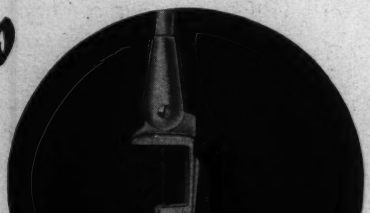

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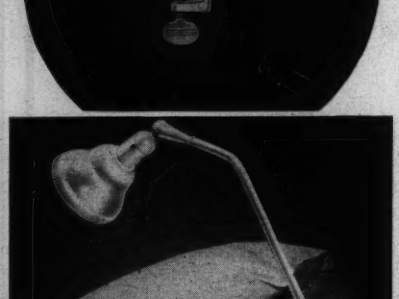

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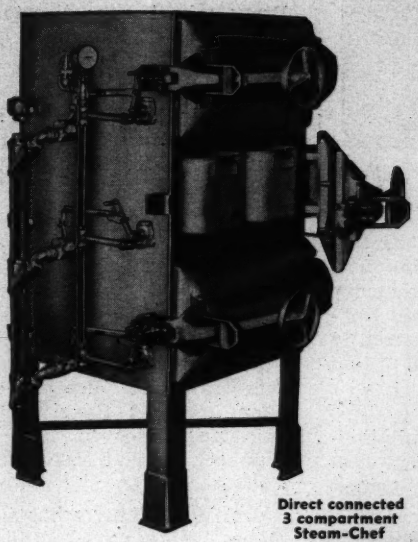

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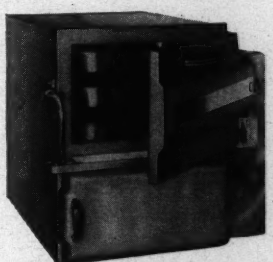

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PERSONAL News

C. K. SHIRO became administrator of Montana Deaconess Hospital, Great Falls, Mont., January 1. He resigned last October as administrator of the City Memorial Hospital at Winston-Salem, N. C. and, prior to that position, was administrator at Spartanburg (S. C.) General Hospital.

Mr. Shiro is a past president of the South Carolina Hospital Association and is a member of the American College of Hospital Administrators and the American Hospital Association.

SISTER MARY VALENTA has been appointed to succeed the late SISTER M. HELEN as superintendent and treasurer of Saint Mary's Hospital, Brooklyn. SISTER MARY MARTINIANA has been named assistant superintendent and assistant treasurer of that institution.

DR. HAROLD MARKS has succeeded DR. JOHN SMILEY as superintendent of San Joaquin General Hospital, French Camp, Calif. Prior to this appointment, Dr. Marks was superintendent of Community Hospital, San Mateo, Calif.

CAPTAIN ZVI SHAHAF, administrative manager of the 5th Military Hospital, Tel Aviv, Israel, has been appointed administrative intern at Beth Israel Hospital, New York City. Capt. Shahaf will spend a period of approximately six months there as an observer of the institution's administrative organization.

DR. JOSEPH C. DOANE has resigned as medical director of the Jewish Hospital, Philadelphia, after almost 22 years of service to devote more time to private practice. A past president of the American Hospital Association, Dr. Doane is a fellow of the American College of Hospital Administrators.

Dr. Doane will continue to serve the Jewish Hospital as an adviser to the board of directors and as an educational director.

GILBERT MOSS has been appointed administrative assistant at Children's Medical Center, Boston, Mass. Mr. Moss, who completed the course in hospital administration at Columbia University in 1948, served his administrative residency at the Massachusetts General Hospital, Boston, and more recently was administrative assistant at that institution.

REX C. MAGEE became administrator of the Memorial Hospital of Sweetwater County, Rock Springs, Wyo., December 1. A member of the American Hospital Association, Mr. Magee succeeded E. L. FOULGER, who resigned last October.

For the past five years, Mr. Magee served as assistant business manager, purchasing agent and personnel director at the University of Colorado Medical Center, Denver. His duties in Denver also covered administrative duties at the Colorado General Hospital, the Colorado Psychopathic Hospital and the school of medicine of the University of Colorado.

The assistant administrator at Memorial Hospital of Sweetwater County is CHARLES D. D'SPAIN, who formerly was an accountant at the University of Colorado Medical Center.

DR. JOHN R. MCGIBONY, chief of the Division of Medical and Hospital Resources, Public Health Service, has been named consultant to the National Security Resources Board.

Dr. McGibony will have responsibility for hospital resources problems in the new Health Resources Division of the National Security Resources Board.

CHARLES C. STEWART, acting superintendent of Mercer Hospital, Trenton, N. J., since June 1, 1949, was appointed superintendent January 1, 1950. Formerly assistant superintendent at Mercer Hospital, Mr. Stewart succeeded GEORGE H. BUCK, who is now director of the University of Maryland Hospital, Baltimore.

THOMAS F. CLARK has resigned as executive secretary of the Association of Western Hospitals, effective February 15. Mr. Clark had been executive secretary of that association for the past 13 years.

MILTON B. SHROYER has been appointed administrator at Cumberland Medical Center, Crossville, Tenn. Mr. Shroyer formerly was associate director of Oak Ridge (Tenn.) Hospital, and had previously served as business manager at that institution.

DR. W. H. LEWIS has succeeded CHRIS J. NEUBERT as administrator of Floyd Hospital, Rome, Ga. Mr. Neubert resigned January 15 to become administrator of Upson County Hospital, Thomaston, Ga. He had served as administrator at Floyd Hospital for the past year and a half.

AMY J. DANIELS, R.N., has been appointed administrator of Marion (Ind.) General Hospital, succeeding HARRY GABLE. A fellow in the American College of Hospital Administrators, Miss Daniels has been a hospital consultant since 1946. Prior to that time, she served as administrator of Elkhart (Ind.) General Hospital, Tobey Hospital, Wareham, Mass., and Wing Memorial Hospital, Palmer, Mass.

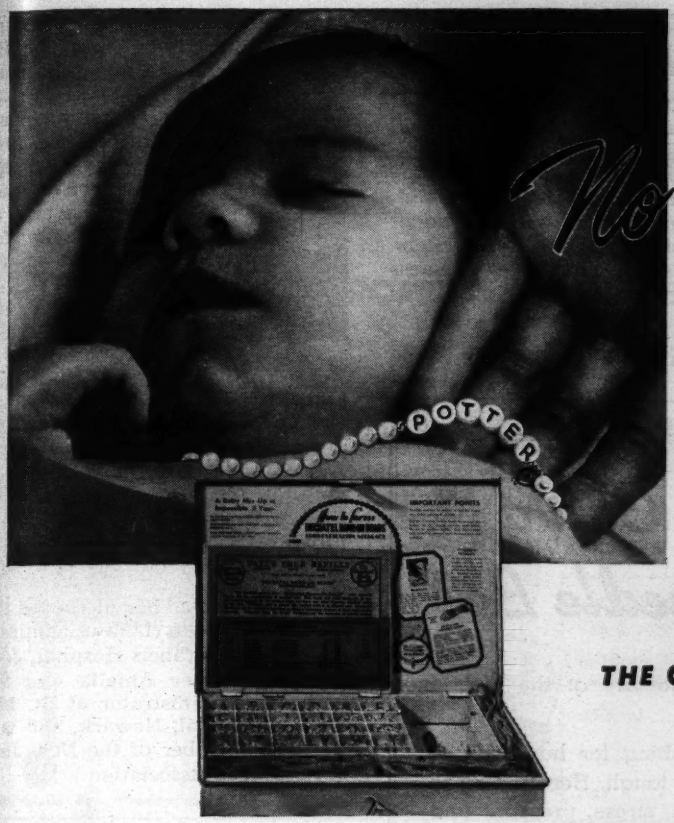
Miss Daniels is a member of the board of directors of the American Nurses Association.

HERBERT G. GILLIS, administrative assistant at Grace Hospital, Detroit, has succeeded RALPH HOBART as assistant administrator of Iowa Methodist Hospital, Des Moines. Mr. Hobart has been appointed administrator of Ransom Memorial Hospital, Ottowa, Kans.

HAYDN M. DEANER has become administrator of Truesdale Hospital, Fall River, Mass., succeeding DELIGHT S. JONES. Mrs. Jones, who had been administrator there since 1945, resigned because of ill health.

Mr. Deaner served his administrative residency at the George F. Geisinger Memorial Hospital, Danville, Pa., and has been the assistant administrator of Truesdale Hospital for the past year.

DONALD CARL BILHORN, admin-



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istrative intern at Hermann Hospital, Houston, has become assistant administrator of Truesdale Hospital.

LYNN IRVING has been named superintendent of Goliad (Tex.) County Memorial Hospital.

DR. RUPERT H. FIKE has been appointed physician in charge of the x-ray department, Vereen Memorial Hospital, Moultrie, Ga. For the past 25 years, Dr. Fike was director of the Albert Steiner Clinic for Cancer and Allied Diseases, Grady Memorial Hospital, Atlanta.

STEPHEN PONDAK has been named administrator of the Millville (N. J.) Hospital. This is a newly created position in place of the former positions of superintendent and business manager. Mr. Pondak was formerly the business manager of the hospital.

DR. JULIEN PRIVER has been named associate director of Mount Sinai Hospital, New York City. He came to Mount Sinai Hospital as an assistant director in 1946 after serving his administrative residency at the Hospital for Joint Diseases, New York City.

Dr. Priver is a graduate of the City College of New York and of the medical school of the University of Western Ontario, London, Ont. In the recent war, he was a major in the Army Medical Corps and served with the Sixth Infantry Division in the Pacific and with the occupation forces in Korea.

SISTER AMALIA has succeeded the late SISTER CHRISTIANA as administrator of St. Francis Hospital, Jersey City. Sister Amalia was the assistant administrator at St. Michael's Hospital, Newark, and is a personal member of the New Jersey Hospital Association.

DR. ROBERT DUNN was appointed director of the department of radiology, Phoebe Putney Memorial Hospital, Albany, Ga., January 10. He replaces DR. T. H. KALMAN JR., who accepted a fellowship with the Army Institute of Pathology.

ERNEST L. BLISS has become administrator-consultant of Jackson-Madison County General Hospital, Jackson, Tenn. Prior to this appointment, Mr. Bliss was staff consultant with James A. Hamilton and Associates, Minneapolis.

NELLIE MCLAREN, R.N., superintendent of Decorah (Iowa) Hospital for the past three and one-half years, has resigned to accept a position as superintendent of Delaware County Memorial Hospital, Manchester, Iowa.

The following appointments were announced recently by the Veterans Administration.

HERBERT A. CHASE, assistant manager of the Veterans Administration Hospital, Coatesville, Pa., became assistant manager of the veterans hospital at Richmond, Va., on December 11. Mr. Chase succeeded H. E. BATSON, who had

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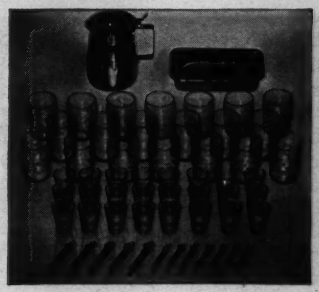

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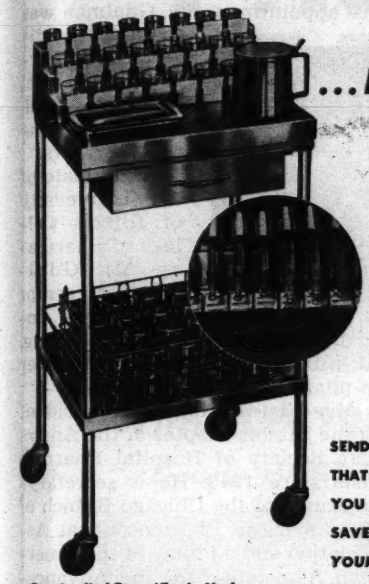

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been executive officer at the Richmond hospital.

DR. MICHAEL L. MATTE, chief medical officer at the Veterans Administration Center, Wood, Wisc., replaced DR. ROBERT C. COOK as manager of the Veterans Administration Hospital, Fort Logan, Colo., January 22. Dr. Cook was appointed assistant chief medical director in the central office.

DR. JOHN B. MCHUGH, chief of professional services at the Veteran Administration Hospital, Outwood, Ky., became manager of the Veteran Administration Hospital now under construction at Minot, N. D., January 22.

DR. BEN G. YEAGER has been appointed chief medical officer at Brentwood Neuropsychiatric Hospital, Los Angeles. He succeeds DR. RICHARD L. HARRIS, who now is manager of the Veterans Administration Hospital under construction at Peekskill, N. Y.

NEVA E. NYE, R.N., formerly educational director at Presbyterian Hospital, Pittsburgh, became superintendent of nurses and director of the School of Nursing at San Diego (Calif.) County General Hospital on December 1. She succeeded S. BESSIE BARNES, who retired from that position after 20 years of service.

DR. CHARLES H. JONES has been named superintendent of Northern State Hospital, Sedro Wooley, Wash. Dr. Jones, who was assistant superintendent for the past several months, succeeds DR. J. W. DOUGHTY, who is retiring.

LOUIS GDALMAN has become director of pharmacy at Michael Reese Hospital, Chicago. Prior to this appointment Mr. Gdalman was

the assistant director of pharmacy at St. Luke's Hospital, Chicago, for the past 20 years.

A graduate of the University of Illinois College of Pharmacy, Mr. Gdalman is senior chemistry instructor in the School of Nursing, St. Luke's Hospital, and a lecturer in pharmacology.

Mr. Gdalman has been president of the Illinois chapter of the American Society of Hospital Pharmacists since 1948. He is secretary-treasurer of the Chicago Branch of the American Pharmaceutical Association and a fellow of the American Association for the Advancement of Science.

DR. H. D. STAILEY, superintendent of Riverside County Hospital, Arlington, Calif., has been named superintendent of Sonoma County Hospital, Santa Rosa, Calif. He replaces DR. A. A. THURLOW at the Santa Rosa hospital.

A. P. NISBET has been appointed superintendent of Tuomey Hospital, Sumter, S. C. Formerly administrator of Central Carolina Convalescent Hospital, Greensboro, N. C., he was succeeded there by F. W. MULCAHY.

CLAUDE RUNNELS, hospital equipment consultant for the Mississippi Commission on Hospital Care, Jackson, has become administrator of Northeast Mississippi Hospital, Boonville.

DR. CHARLES F. SEBASTIAN, assistant chief and director of Los Angeles (Calif.) Receiving Hospital, has been appointed to the newly created post of general manager at that hospital.

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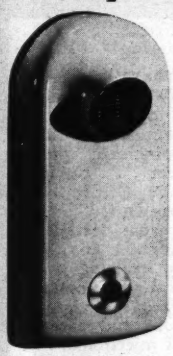

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